

Murata Power Solutions

Driving the Next Era of Innovation

A Global Leader in the Design and Manufacturing of

AC-DC and DC-DC Power Solutions

(Interactive PDF Tool)

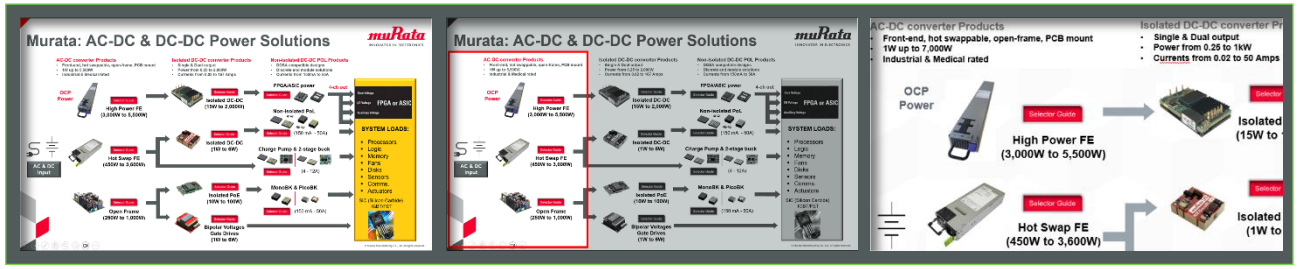
© Murata Manufacturing Co., Ltd. All rights reserved.

HOME PAGE

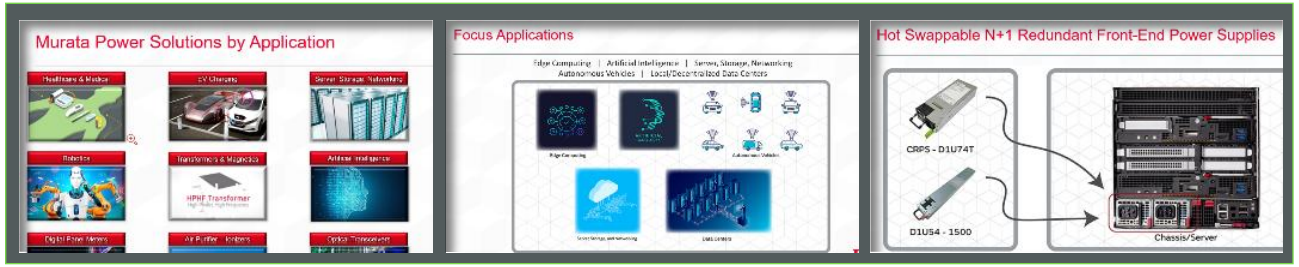
One Murata Power: Driving the Next Era of Innovation

muRata
INNOVATOR IN ELECTRONICS

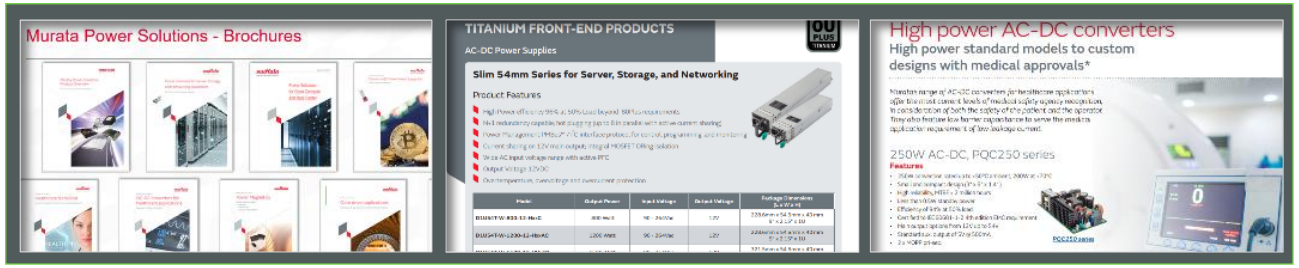
Power Solutions Overview



Applications



Brochures



Follow Us on Social Media

Rev. v6.0 Notes

© Murata Manufacturing Co., Ltd. All rights reserved.

HOME

Click each image for product offering, Selector Guide for Datasheets

Murata: AC-DC & DC-DC Power Solutions

AC-DC converter Products
- Front-end, hot swappable, open-frame, PCB mount
- 1W up to 5,500W
- Industrial & Medical rated

Isolated DC-DC converter Products
- Single & Dual output
- Power from 0.25 to 1.5kW
- Currents from 200mA to 125 Amps

Non-isolated DC-DC POL Products
- DOSA compatible designs
- Discrete and module solutions
- Currents from 150mA to 50A

AC & DC Input

OCP Power



Selector Guide

High Power FE (3,000W to 5,500W)



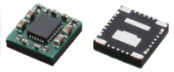
Selector Guide

Isolated DC-DC (15W to 1,500W)

FPGA/ASIC power

4-ch out

Selector Guide



All Non-isolated Solutions



Selector Guide

(150 mA - 50A)



Selector Guide

Hot Swap FE (450W to 3,600W)



Selector Guide

Isolated DC-DC (1W to 6W)

Charge Pump & 2-stage buck



Selector Guide

(4A - 10A)



Selector Guide

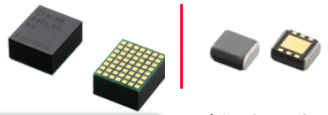
Open Frame (250W to 1,000W)



Selector Guide

Isolated PoE (10W to 100W)

MonoBK & PicoBK



Selector Guide

(150 mA - 50A)



Selector Guide

Bipolar Voltages Gate Drives (1W to 6W)

Core Voltage

I/O Voltage

Auxiliary Voltage

FPGA or ASIC

SYSTEM LOADS:

- Processors
- Logic
- Memory
- Fans
- Disks
- Sensors
- Comms.
- Actuators

SiC (Silicon Carbide) IGBT/FET



© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click Part Number for datasheet

OCP Power Shelf & PSU Products



click for Brochure
Data Center and Open Compute Power Solutions

muRata

Dual Input Model

Part Number	Appearance	Status	Output Voltage Power	Applicable Rack Width	Open Rack	Height	Outlet Q'ty	BBU Conn.	Input Cfg.	Redundancy	Conn. Method	Dim. (W×L×H mm)	Weight (kg)	Operating Temp. (°C)
MWOCES-211-P-C		In Production	50/54.5V 21.6kW	21 inch	V3	1 OU	0	Yes	•3 Phase Wye/Delta •Single Phase •HVDC	N+0/N+N	Bar Clip	537×720×44.5	12.1	0 to 40
MWOCES-191-P-C		Under Development	50/54.5V 21.6kW	19 inch	V3	1 RU	0	Yes	•3 Phase Wye/Delta •Single Phase •HVDC	N+1/N+N	Bar Clip	448.6×720×44		0 to 40
MWOCES-211-P-D		Under Development	50V 33kW	21 inch	V3 HPR	1 OU	0	Yes	•3 Phase Wye/Delta •Single Phase •HVDC	N+0/N+1/N+N	Bar Clip	537×720×45		−5 to 45
MWOCES-191-P-D		Under Development	50V 33kW	19 inch	V3 HPR	1 RU	0	No	•3 Phase Wye/Delta •Single Phase •HVDC	N+0/N+1/N+N	Bar Clip	448×720×44.4		−5 to 45
MWOCES-191-M-B		In Production	54.5V 18kW	19/21 inch	V2	1 RU	0	Yes	•3 Phase Wye/Delta •Single Phase •HVDC	N+1/N+N	KIT	448.6×650×45	8.6	0 to 40
MWOCES-192-M		In Production	12.3V 15kW	19/21 inch	V1, V2	2 RU	6	Yes	•3 Phase Wye/Delta •Single Phase	N+1/N+N	KIT	444×680×87	16.4	0 to 40
MWOCES-192-A		In Production	12.3V 15kW	19/21 inch	V1, V2	2 RU	6	Yes	•3 Phase Delta	N+1	KIT	444×680×87	17.0	0 to 40
MWOCES-211-G		In Production	12.3V 15kW	21 inch	V1, V2	1 OU	2	Yes	•3 Phase Wye •Single Phase	N+1/N+N	KIT	537×680×45	11.2	0 to 40
MWOCES-211-F		In Production	12.3V 15kW	21 inch	V2	1 OU	2	No	•3 Phase Wye •Single Phase	N+1/N+N	Direct	537×680×45	11.2	0 to 40

Single Input Model

Part Number	Appearance	Status	Output Voltage Power	Applicable Rack Width	Open Rack	Height	Outlet Q'ty	BBU Conn.	Input Cfg.	Redundancy	Conn. Method	Dim. (W×L×H mm)	Weight (kg)	Operating Temp. (°C)
MWDCES-191-C		In Production	12.3V 12kW	19 inch		1 RU	2	Yes	•3 Phase Wye/Delta •Single Phase	N+1	KIT	437×650×43.8	9.6	0 to 40
MWDCES-191-D		Under Development	12.3V 12kW	19 inch		1 RU	0	Yes	•HVDC	N+1	KIT	437×650×43.8		0 to 40
MWOCES-211-P-C-S		In Production	50/54.5V 20.4kW	21 inch	V3	1 0U	0	Yes	•3 Phase Wye/Delta •Single Phase •HVDC	N+0	Bar Clip	537×720×45		0 to 40

PSU Selection on Next Page

rights reserved.

BACK

OCP Power Shelf & PSU Products

Data Center & Open Compute
Power Shelf click for Power Shelf
Data Center & Open Compute
PSU click for PSU

*** Click the part number to download a data sheet.**

3.0kW
12V output



MWOCP74-3000-A-RM

3.6kW
50.5V output



MWOCP68-3600-B-RM

3.6kW
54.5V output



MWOCP68-3600-D-RM

5.5kW
50.5V output



New
MWOCP67-5500-B-RM

Blanking Panel for Power Shelf



MWOCPxx-B Series

RMU
Remote Management Unit



MWOC-RMU Series

Rack Mount KIT



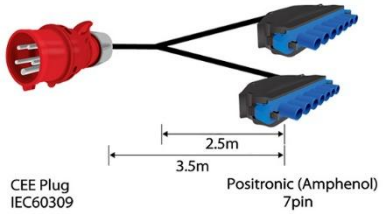
MWOC-KIT Series

PUD, Input Cable



MWOC-PDU-A-3

AC Input Power Cable



MWOC-PCA Series

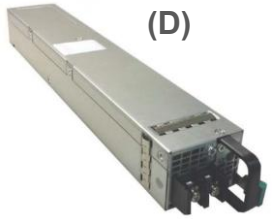
© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Server, Storage, & Networking | AI & GPU - 1U Front Ends (12V & 54V)


(W)


(M)


(D)

D1U54 Series - Long - 1U x 54.5mm x 321.5mm (HxWxL)

- **2500W** - click for data sheets → AC(305)/HVDC-Input (Titanium), DC-Input
- **2000W** - click for data sheets → AC-Input (Titanium), AC-Input (Platinum), DC-Input
- **1500W** - click for data sheets → AC(305)/HVDC-Input (Titanium), AC-Input (Titanium), AC-Input (Platinum), DC-Input
- **1200W** - click for data sheets → DC-Input

(W) AC-Input Range: 90-264VAC
(M) AC/HVDC-Input Range: 90-305VAC, 192-400Vdc
(D) DC-Input Range: -40 to -72Vdc


(W)

D1U74 Series - 1U x 73.5mm x 185mm (HxWxL)

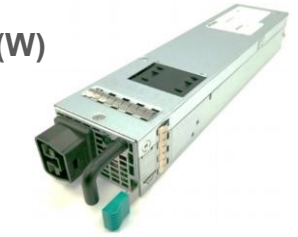
- **3200W 54V M-CRPS,** click for data sheet → AC-Input (Titanium)
- **3200W CRPS,** click for data sheet → AC-Input (Titanium)
- **2700W CRPS,** click for data sheet → AC-Input (Titanium)
- **1600W CRPS,** click for data sheet → AC-Input (Titanium)

AC-Input Range: 90-264VAC

click for Landing page → Front-End Titanium & Platinum Efficiency AC-DC Power

click for App Notes → D1U Application Notes – Front-End Power Supplies


(W)


(M)


(D)

D1U54 Series - Short - 1U x 54.5mm x 228.6mm (HxWxL)

- **1200W** - click for data sheet → AC-Input (Titanium), DC-Input
- **800W** - click for data sheet → AC-Input (Titanium), AC(305)/HVDC-Input (Platinum), DC-Input ←(L=236.6mm)
- **650W** - click for data sheets → AC-Input (Platinum), DC-Input
- **450W** - click for data sheets → AC-Input (Platinum), DC-Input

(W) AC-Input: 90-264VAC
(M) AC/HVDC-Input: 90-305VAC, 260-400Vdc
(D) DC-Input Range: -40 to -72Vdc (D)


(W)


(D)

D1U86 series - 1U x 86.4mm x 197.7mm (HxWxL)

- **1600W** - click for data sheets → AC Input (Titanium), AC-Input (Platinum)
- **800W** - click for data sheet → AC Input (Titanium)

(W) AC-Input Range: 90-264VAC
(D) DC-Input Range: -40 to -72Vdc

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

AC-DC Power Supplies // Industrial & Medical Applications

Power Products
Application Notes

PQC Series 250W & 600W open-frame (3x5) - **PQC250** & **PQC600** & **COVER**


250W


600W



Open-Frame | Medical BF Rated | Enclosed w/ cover

PQU650 series 450W-650W U-channel (4x6) - **PQU650** & **PQU650M** & **COVER**


U-channel


Enclosed w/ cover

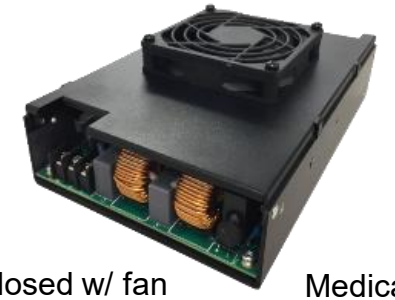

Enclosed w/ fan


Medical BF Rated

PQU1000 series 800W-1,000W U-channel (5x8) – **PQU1000** & **COVER**


U-channel


Enclosed w/ cover


Enclosed w/ fan

Medical BF Rated

3" x 5"

❖ PQC250 Series AC-DC Power Supply

- 250W convection cooled @ @ 50°C
- Industry leading MTBF 4.5M hrs (fan less)
- IEC62368/IEC60601 Certified, Medical 2xMOPP

3" x 5"

❖ PQC600 Series AC-DC Power Supply

- High density, 600W (fan), 350W (convection) @ 50°C
- IEC62368/IEC60601, 2xMOPP
- Applied Part Type B & BF Rated (Isolation & Patient Leakage Current Performance

4" x 6"

❖ PQU650 Series AC-DC Power Supply

- 650W (fan), 450W (convection) @ 50°C
- Medical approved IEC60601-1, 2xMOPP certified
- Applied Part Type B & BF Rated (Isolation & Patient Leakage Current Performance

5" x 8"

❖ PQU1000 Series AC-DC Power Supply

- 1,000W (fan), 800W (convection) @ 50°C
- IEC62368/IEC60601 Certified, Medical 2xMOPP
- Applied Part Type B & BF Rated

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

AC-DC Power Supplies // Application Notes

PQC Series 250W & 600W open-frame (3x5) - **PQC250** & **PQC600** & **COVER**



250W



600W



Open-Frame | Medical BF Rated | Enclosed w/ cover

PQU650 series 450W-650W U-channel (4x6) - **PQU650** & **PQU650M** & **COVER**



U-channel



Enclosed w/ cover



Enclosed w/ fan



Medical BF Rated

Power Products

Application Notes

3” x 5”

❖ PQC250 Series AC-DC Power Supply

- PQC250 Thermal deployment
- PQC250 Current Sharing deployment

4” x 6”

❖ PQU650 Series AC-DC Power Supply

- PQU650 Thermal Deployment
- PQU650 Current Sharing
- PQU650 External ORing MOSFET Reference Circuit

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

click for Landing page

Regulated DC-DC Power Converters

muRata

10W – 100W

Input Voltage[V]

160V

75V

36V

18V

9V

15W

30W

75W

100W

Output Power [W]

BWR Series
2" x 1"
Dual output
Vin=18-75V

Vo=+/-5V
Vo=+/-15V
(10W)

1.5KV I/O
RoHS
100˚C



UEI15 Series
1.1 x .96 x .33"
Single output
Vin=18-75V

Vo = 3.3V
Vo = 5V
Vo = 12V
Vo = 15V
(15W)

2.25KV I/O
RoHS
85˚C



SPM25 Series
1" x 1"
Single output
Vin=36-75V

Vo = 5V
(25W)

1.6KV I/O
RoHS
85˚C



UEI25 Series
1.1 x .96 x .33"
Single output
Vin=36-75V

Vo = 5V
Vo = 12V
(25W)

2.25KV I/O
RoHS
85˚C



ULT Series
1/32nd brick
Single output
Vin=36-75V

Vo = 3.3V
(25W)
Vo = 12V
(30W)

DOSA
1.5KV I/O
RoHS
85˚C



UEI30 Series
.92 x 1.92 x .35"
Single output
Vin=18-75V

Vo = 12V
(30W)

2.25KV I/O
RoHS
85˚C



UHE30 Series
1.6 x 2 x 0.4"
Single output
Vin=18-75V

Vo = 12V (30W)

1.5KV I/O
RoHS
85˚C



UWS Series
1/16th brick
Single output
Vin=18-75V

Vo = 3.3V
Vo = 5V
Vo = 12V
(50W)

DOSA
2.25KV I/O
RoHS
85˚C



IRS Series
1/16th brick
Single output
Vin=18-75V

Vo = 5V
Vo = 12V
(50W)

DOSA
2.25KV I/O
RoHS
85˚C



ULE Series
1/8th brick
Single output
Vin=36-75V

Vo = 53V
(60W)

2.25KV I/O
RoHS
85˚C



UWE Series
1/8th brick
Single output
Vin=18-75V

Vo = 5V (75W)
Vo = 12V (72W)
Vo = 15V (75W)

DOSA
2.25KV I/O
RoHS
85˚C



ULS Series
1/16 brick
Single output
Vin=36-75V

Vo = 3.3V
Vo = 5V
Vo = 12V
(100W)

DOSA
RoHS
2.25KV I/O
85˚C



IRQ Series
1/4 brick
Single output
Vin=57-160V

Vo = 24V
(100W)

DOSA
RoHS
3.0KV I/O
85˚C



UEI15 Series
1.1 x .96 x .33"
Single output
Vin=9-36V

Vo = 3.3V
Vo = 5V
Vo = 12V
Vo = 15V
(15W)

2.25KV I/O
RoHS
85˚C



SPM15 Series
1" x 1"
Single output
Vin=9-36V

Vo = 5V
(15W)

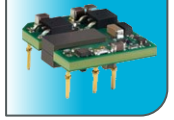
1.6KV I/O
RoHS
85˚C



BEI15 Series
1.1 x .96 x .33"
Dual output
Vin=9-36V

Vo=+/-12V
Vo=+/-15V
(15W)

2.25KV I/O
RoHS
85˚C



UEI30 Series
.92 x 1.92 x .35"
Single output
Vin=9-36V

Vo = 5V
Vo = 12V
Vo = 15V
(30W)

2.25KV I/O
RoHS
85˚C



UHE30 Series
1.6 x 2 x 0.4"
Single output
Vin=9-36V

Vo = 5V
(25W)

1.5KV I/O
RoHS
85˚C



UWS-Q12 Series
1/16th brick
Single output
Vin=9-36V

Vo = 5V
Vo = 12V
Vo = 24V
(50W)

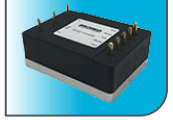
DOSA
2.25KV I/O
RoHS
85˚C



IRS-Q12 Series
1/16th brick
Single output
Vin=9-36V

Vo = 5V
Vo = 12V
Vo = 24V
(50W)

DOSA
2.83KV I/O
RoHS
85˚C



PoE PSE

UWE Series
1/8th brick
Single output
Vin=9-36V

Vo = 5V
Vo = 12V
Vo = 15V
Vo = 24V
(66-75W)

DOSA
2.25KV I/O
RoHS
85˚C



100-300W on next page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

click for Landing page

Regulated DC-DC Power Converters

muRata

100W – 300W

Input Voltage[V]

160V

75V

36V

18V

9V

UWE Series
1/8 brick
Single output
Vin=18-75V
Vo = 12V (120W)
DOSA RoHS 2.25KV I/O 85˚C

UEE Series
1/8 brick
Single output
Vin=36-75V
Vo = 5V
Vo = 12V
(150W)
DOSA RoHS 2.25KV I/O 85˚C

IRQ-W80 Series
1/4 brick
Single output
Vin=16-160V
Vo = 12V
Vo = 24V
Vo = 54V
(150W)
RoHS 4.2KV I/O 100˚C

UWE-Q12 Series
1/8 brick
Single output
Vin=9-36V
Vo = 5V
Vo = 12V
Vo = 24V
(120W)
DOSA RoHS 2.25KV I/O 85˚C

IRE Series
1/8 brick
Single output
Vin=9-36V
Vo = 5V
Vo = 12V
Vo = 24V
(120W)
RoHS 2.0KV I/O 85˚C

MPE165 Series
1/8 brick
Single output
Vin=36-75V
Vo = 54V
(165W)
RoHS 2.25KV I/O 85˚C

PoE PSE

DVQ Series
1/4 brick
Single output
Vin=36-75V
Vo = 3.3V
(198W)
PMBus RoHS 2.25KV I/O 85˚C

Parallel Operation

MPS0117V2NBC
1/16 brick
Single output
Vin=36-75V
Vo=12V
200W (baseplate)
180W (without)
RoHS 2.25KV I/O 85˚C

UWQ-12/17
1/4 brick
Single output
Vin=18-75V
Vo = 12V (204W)
DOSA RoHS 2.25KV I/O 85˚C

DBE/DVE Series
1/8 brick
Single output
Vin=36-75V
Vo = 5V (200W)
Vo=12V (300W)
PMBus RoHS 2.25KV I/O 85˚C

Parallel Operation

RBE Series
1/8 brick
Single output
Vin=36-75V
Vo = 12V
(240W)
RoHS 2.25KV I/O 85˚C

UWE Series
1/8 brick
Single output
Vin=18-60V
Vo = 12V
(240W)
PMBus RoHS 2.25KV I/O 85˚C

IRH-W80 Series
1/2 brick
Single output
Vin=16-160V
Vo = 12V
Vo = 24V
Vo = 54V
(250W)
RoHS 4.2KV I/O 105˚C

IRV300 Series
7.3" x 4.6" x 1.6"
Single output
Vin=16-160V
Vo = 12V
Vo = 24V
Vo = 54V
(300W)
RoHS 4.2KV I/O 85˚C

MPQ0125
1/4 brick
Single output
Vin=18-75V
Vo = 12V
(300W)
PMBus RoHS 2.25KV I/O 85˚C

SPC-54/4.4
2.6x0.69x1.25"
Single output
Vin=11-13.2
Vo = 54.2V (240W
RoHS 2.25KV I/O 80˚C

240W PoE+

120W

150W

200W

300W

Output Power [W]

300-1,6000W on next page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

300W – 1,500W

click for Landing page

Regulated DC-DC Power Converters

Input Voltage[V]

160V

75V

36V

18V

9V

PAH-28 Series
1/2 brick
Single output
Vin=36-75V
Vo = 28V (350W)
RoHS
2.25KV I/O
85˚C



DSE/DAE/DCE
1/8 brick
Single output
Vin=36-75V
Vo = 12V (396W)
PMBus
DOSA
RoHS
2.25KV I/O
85˚C



Base Model	Included Options
DSE0133V2	Sense & Trim, PMBus
DAE0133V2	Sense & Trim
DCE0133V2	

Parallel Operation

PAH-48 Series
1/2 brick
Single output
Vin=36-75V
Vo = 48V (408W)
Vo = 53V (450W)
RoHS
2.25KV I/O
85˚C



PAH-28 Series
1/2 brick
Single output
Vin=36-75V
Vo = 28V (448W)
RoHS
2.25KV I/O
85˚C



DSQ/DAQ/DCQ
1/4 brick
Single output
Vin=36-75V
Vo = 12V (600W)
PMBus
DOSA
RoHS
2.25KV I/O
85˚C



Parallel Operation

MPE600
1/8 brick
Single output
Vin=36-60V
Vo = 12V (600W)
PMBus
RoHS
85˚C



RFPA Quarter Brick

MPQ600
1/4 brick
Single output
Vin=36-75V
Vo = 28V (600W)
Vtrim = 14 – 35V
PMBus
RoHS
2.25KV I/O
85˚C



RFPA Quarter Brick

MPQ700
1/4 brick
Single output
Vin=36-75V
Vo = 50V (700W)
Vtrim = 25 – 55V
PMBus
RoHS
2.25KV I/O
85˚C



Parallel Operation

Non-Isolated

MPQ860
1/4 brick
Single output
Vin=36-60V
Vo = 12V (860W)
PMBus
RoHS
85˚C



Parallel Operation

Non-Isolated

MPQ800
1/4 brick
Single output
Vin=36-60V
Vo = 12V (800W)
PMBus
RoHS
2.25KV I/O
85˚C



Parallel Operation

Non-Isolated

MPE800
1/8 brick
Single output
Vin=36-60V
Vo = 12V (800W)
PMBus
RoHS
85˚C



Parallel Operation

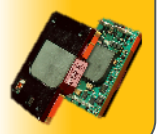
Non-Isolated

MPQ1300
1/4 brick
Single output
Vin=36-60V
Vo = 12V (1,300W)
PMBus
RoHS
85˚C



Parallel Operation

MPQ1500
1/4 brick
Single output
Vin=36-60V
Vo = 12V (1,500W)
PMBus
RoHS
500V I/O
85˚C



Parallel Operation

PAH-28 Series
1/2 brick
Single output
Vin=18-36V
Vo = 28V (350W)
RoHS
2.25KV I/O
85˚C



300W 400W 450W 700W 1,500W

Output Power [W]

PMBus®

A Brief Introduction to PMbus®

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

PowerAid — Low Power DC-DC Converters- Single Output (Unregulated)

SINGLE OUTPUT

click product images for data sheet

1kV Isolation

NTE Series — Vin: 3.3V, 5V, 12V — Vout: 3.3V, 5V, 9V, 12V, 15V — SMD

MTE1 Series — Vin: 3.3V, 5V, 12V, 24V — Vout: 5V, 6V — SMD

MTU1 Series — Vin: 5V, 12V — Vout: 5V, 9V, 12V, 15V — SMD

NMR Series — Vin: 5V, 12V, 24V — Vout: 5V, 12V, 15V — SIP6

CME Series — Vin: 5V — Vout: 5V, 12V — 0.75W — DIP8, SIP4

MER1 Series — Vin: 5V, 12V, 15V, 24V, 48V — Vout: 5V, 9V, 12V, 15V — SIP6

CRE1 Series — Vin: 5V, 12V, 24V — Vout: 5V, 12V, 15V — SMD, DIP8, SIP4

NME1 Series — Vin: 5V — Vout: 5V — SIP4

MEE1 Series — Vin: 3.3V, 5V, 12V, 15V, 24V — Vout: 3.3V, 5V, 9V, 12V, 15V — DIP8, SIP4

NMR1 Series — Vin: 5V — Vout: 5V — SIP6

3kV Isolation

NXE1 Series — Vin: 3.3V, 5V — Vout: 3.3V, 5V — SMD

CME Series — Vin: 3.3V, 5V — Vout: 3.3V, 5V, 12V — SIP4

NKE Series — Vin: 3.3V, 5V, 12V — Vout: 3.3V, 5V, 9V, 12V, 15V — DIP8, SIP4

CMR Series — Vin: 5V — Vout: 5V — SIP7

CRE1 Series — Vin: 3.3V, 5V — Vout: 5V — SIP4

4.2kV(+) Isolation

NXJ1 Series — Vin: 3.3V, 5V, 12V — Vout: 3.3V, 5V, 12V, 15V — SMD

NMJ Series — Vin: 3.3V, 5V, 12V — Vout: 3.3V, 5V, 9V, 12V, 15V — SIP7 — 5.2kV Isolation

MEJ1 Series — Vin: 3.3V, 5V, 12V, 15V, 24V — Vout: 3.3V, 5V, 9V, 12V, 15V — SIP7 — 5.2kV Isolation

NXJ1T Series — Vin: 5V, 12V — Vout: 5V, 15V — New — SMD

MEJ1T Series — Vin: 5V — Vout: 5V — New — SIP7 — 6kV Isolation

1W

Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible

PowerAid — Low Power DC-DC Converters- Single Output (Unregulated)

SINGLE OUTPUT

click product images for data sheet

1kV Isolation

3kV Isolation

4.2kV(+) Isolation

NME Series — Vin: 5V, 12V, 24V — Vout: 5V, 9V, 12V, 15V, 24V — DIP8, SIP4

NMV1 Series — Vin: 5V — Vout: 5V — 3kV Isolation — SIP7

NMV Series — Vin: 5V, 12V — Vout: 5V, 9V, 12V, 15V — DIP14, SIP7

CRR1 Series — Vin: 5V — Vout: 5V — SIP6

MEV1 Series — Vin: 5V, 12V, 15V, 24V — Vout: 5V, 9V, 12V, 15V — DIP14, SIP7

CMR Series — Vin: 5V — Vout: 5V — 0.75W — SIP6

MMV1 Series — Vin: 5V — Vout: 5V, 24V — SIP7

CRV1 Series — Vin: 5V, 12V — Vout: 5V, 15V — SIP7

1W

Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible
Pin Compatible

Unregulated & Regulated
Next Page

BACK

PowerAid — Low Power DC-DC Converters- Single Output (Unregulated)

SINGLE OUTPUT

click product images for data sheet

1kV Isolation

2W

MTU2 Series

Vin	Vout
3.3V	5V
5V	24V



SMD

CRL2 Series

Vin	Vout
5V	5V
12V	



SIP4

NML Series

Vin	Vout
5V	5V
12V	9V
	12V
	15V



SIP4

NMG Series

Vin	Vout
5V	5V
12V	9V
15V	12V
24V	15V
	24V



SIP6

3kV Isolation

NMK Series

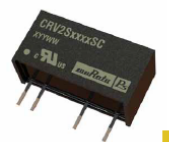
Vin	Vout
5V	5V
12V	9V
15V	12V
24V	15V



SIP7

CRV2 Series

Vin	Vout
5V	5V



SIP7

NXE2 Series

Vin	Vout
5V	5V
12V	12V
	15V



SMD

4.2kV(+) Isolation

MEJ2 Series

Vin	Vout
3.3V	3.3V
5V	5V
12V	9V
15V	12V
	15V



SIP7

NXJ2 Series

Vin	Vout
5V	5V
12V	12V
24V	15V



SMD

PowerAid — Low Power DC-DC Converters- Single Output (Unregulated)

SINGLE OUTPUT

click product images for data sheet

1kV Isolation

3W

MEE3 Series

Vin	Vout
5V	5V
12V	9V
	12V
	15V



SIP4

3kV Isolation

MEV3 Series

Vin	Vout
5V	5V
12V	9V
	12V
	15V



SIP7

4.2kV(+) Isolation

Dual Output
on Next Page

PowerAid — Low Power DC/DC Converters- Single & Dual Output (Regulated)

SINGLE OUTPUT

click product images for data sheet

1kV Isolation

1W

MEF1 Series

Vin	Vout
3.3V	3.3V
5V	5V
12V	
24V	



SIP7

NMF Series

Vin	Vout
5V	5V
12V	
24V	



SIP7 DIP14

NCS1 Series

Vin	Vout
12V	3.3V
24V	5V
	12V



SIP7

NDL Series

Vin	Vout
5V	5V
12V	9V
24V	12V
	15V



SIP8

NDTS Series

Vin	Vout
5V	5V
12V	12V
24V	



DIP24

NCS3 Series

Vin	Vout
12V	3.3V
48V	5V
	12V
	15V



SIP8

NCS6 Series

Vin	Vout
12V	3.3V
48V	5V
	12V
	15V



DIP24

NDS6 Series

Vin	Vout
24V	5V
	12V
	15V



DIP24

3kV(+) Isolation

MTC1 Series

Vin	Vout
5V	3.3V
12V	5V
24V	12V



SMD

NXF1 Series

Vin	Vout
3.3V	3.3V
5V	5V



SMD

MEF1 Series

Vin	Vout
3.3V	3.3V
5V	5V
12V	
24V	



SIP7

MTC2 Series

Vin	Vout
12V	3.3V
24V	5V
	12V



SMD

NCM3 Series

Vin	Vout
12V	5V
	12V
	24V



SMD

NCM6 Series

Vin	Vout
5V	5V
12V	12V
	15V



5.2KV Isolation

DIP24

BACK

Low Power DC-DC Converters- Dual Output (Unregulated)

DUAL OUTPUT

click product images for data sheet

1kV Isolation

MTU1 Series

Vin	Vout
5V	±9V
12V	±12V

SMD

MEA1 Series

Vin	Vout
5V	±5V
12V	±9V
15V	±12V
24V	±15V
48V	

SIP7 DIP14

NTA Series

Vin	Vout
5V	±5V
12V	±9V
	±12V
	±15V

SMD

NMA Series

Vin	Vout
5V	±5V
12V	±9V
	±12V
	±15V

SIP7 DIP14

3kV(+) Isolation

NKA Series

Vin	Vout
3.3V	±3.3V
5V	±5V
12V	±9V
	±12V
	±15V

SIP6 DIP14

NTV Series

Vin	Vout
5V	±5V
12V	±9V
	±12V
	±15V

SMD

NMV Series

Vin	Vout
5V	±5V
12V	±12V
15V	±15V

SIP7 DIP14

CRV1 Series

Vin	Vout
5V	±12V
12V	

SIP7

MEV1 Series

Vin	Vout
5V	±5V
12V	±9V
24V	±12V
48V	±15V

SIP7 DIP14

NMJ Series

Vin	Vout
5V	±5V
12V	±9V
	±12V
	±15V

SIP7

5.2kV Isolation

CMR Series

Vin	Vout
5V	±12V
12V	±15V

SIP7

0.75W

MEJ1 Series

Vin	Vout
5V	±3.3V
12V	±5V
15V	±9V
24V	±12V
	±15V

SIP7

5.2kV Isolation

1W

NMH Series

Vin	Vout
5V	±5V
12V	±9V
24V	±12V
	±15V

SIP7 DIP14

NMK Series

Vin	Vout
5V	±5V
12V	±9V
15V	±12V
24V	±15V

SIP7

MEJ2 Series

Vin	Vout
5V	±3.3V
12V	±5V
15V	±9V
	±12V
	±15V

SIP7

5.2kV Isolation

2W

Pin Compatible

Pin Compatible

Pin Compatible

Low Power DC-DC Converters- Single & Dual Output (Regulated)

DUAL OUTPUT

click product images for data sheet

1kV Isolation

NDTD Series

Vin	Vout
5V	±12V
12V	±15V
24V	

DIP24

NDS6 Series

Vin	Vout
24V	±5V
	±12V
	±15V

DIP24

NCS6 Series

Vin	Vout
12V	±5V
48V	±12V
	±15V

DIP24

5kV Isolation

NCM6 Series

Vin	Vout
5V	±5V
12V	±12V
	±15V

DIP24

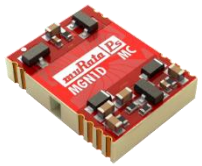
3W

6W

Pin Compatible

BACK

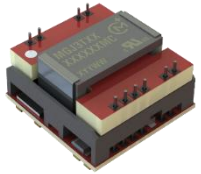
Gate Drive Power - SiC (Silicon Carbide) MOSFET / IGBT



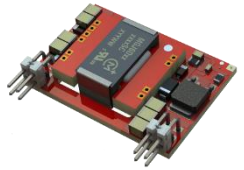
GaN



IGBT



SiC



MOSFET

1W	MGJ1 Series		MOS, IGBT, SiC	click for data sheets → **MGJ1 Series**
	MGJ1V Series		MOS, SiC	click for data sheets → **MGJ1V Series**
	MGJ1T Series **New**		MOS, SiC	click for data sheets → **MGJ1T Series**
	MGN1 Series		GaN	click for data sheets → **MGN1 Series**
2W	MGJ2 Series		MOS, IGBT	click for data sheets → **MGJ2 Series**
	MGJ2 SM Series		MOS, IGBT, SiC	click for data sheets → **MGJ2 SM Series**
3W	MGJ3 Series		MOS, IGBT, SiC	click for data sheets → **MGJ3 Series**
6W	MGJ6 Series		MOS, IGBT, SiC	click for data sheets → **MGJ6 Series**
	MGJ6 SIP/DIP Series		MOS, IGBT, SiC	click for data sheets → **MGJ6 SIP/DIP Series**
	MGJ6 Low Profile Series		MOS, IGBT, SiC	click for data sheets → **MGJ6 Low Profile Series**

Voltage Levels on Next Page

Power Products

Application Notes

IGBT/MOSFET/SiC/GaN gate drive DC-DC converters

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

PowerAid — Low Power DC-DC Converters- Single & Dual Output

GATE DRIVE

click product images for data sheet

5.2kV(+) Isolation

Continuous Barrier Withstand Voltage 3kV

MGJ1 Series

Vin	Vout
5V	15/-3V
12V	15/-5V
15V	15/-9V
24V	19/-5V



1W — SMD

MGJ1T Series

Vin	Vout
12V	15/-3V
15V	15/-5V
24V	18/-2.5V



New

1W - Continuous barrier withstand voltage 2.2KV — SMD

MGJ1V Series

Vin	Vout
12V	15/-3V
15V	15/-5V
24V	18/-2.5V



1W - Continuous barrier withstand voltage 1.5KV — SMD

MGN1

Vin	Vout
5V	8V
12V	12V
	+6/-3V



1W - Continuous barrier withstand voltage 1.1kV — SMD

MGJ2 Surface Mount Series

Vin	Vout
12V	15/-5V
15V	15/-9V
	20/-5V



2W - Continuous barrier withstand voltage 2.5KV — SMD

MGJ2 Series

Vin	Vout
5V	15/-3V
12V	15/-5V
15V	15/-8.7V
24V	15/-15V
	See datasheet



2W - Continuous barrier withstand voltage 2.4KV — SIP7

MGJ3 Series

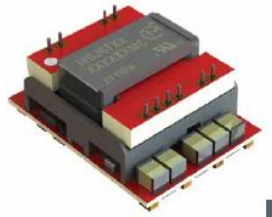
Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



3W — SMD

MGJ6 Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W — SMD

MGJ6 Low Profile Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W

MGJ6 SCDC Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W — SIP / DIP

NXE1 Series

Vin	Vout
3.3V	3.3V
5V	5V



1W — SMD

NXE2 Series

Vin	Vout
5V	5V
12V	12V



1W — SMD

NXJ1 Series

Vin	Vout
3.3V	3.3V
5V	5V
12V	12V
	15V



1W - Continuous barrier withstand voltage 1KV — SMD

NXJ2 Series

Vin	Vout
5V	5V
12V	12V
24V	15V



2W - Continuous barrier withstand voltage 1KV — SMD

BACK

click for Landing page

Isolated DC-DC converters for PoE

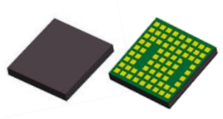
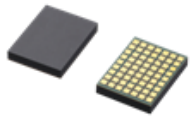
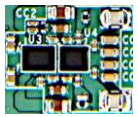
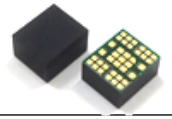
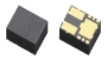
List of PoE Modules

Standard	Type	Class	PSE's maximum suppling power	PD's maximum power	Appearance & Shape	Size	Output Voltage	Part Number	Features
PoE IEEE802.3af	Type1	0 (3)	15.4W	12W 10W		26 x 14.8 x 6.2 mm	12V 5V	MYBSP01201ABF MYBSP00502ABF	• Low profile SMD type • Operating Temperature : -40 to +85 °C • Low EMI : compliant with CISPR class B • 2250Vdc Input-Output Isolation • Suffix=B : Class2 with PFM control • Suffix=S/T/U : Class0/1/2 with PWM control
		2	7W	6.49W			12V 5V	MYBSP01201ABFB MYBSP00502ABFB	
		0 (3)	15.4W	12W 10W		26 x 14.8 x 6.0 mm	12V 5V	MYBSP01201ABFS MYBSP00502ABFS	
		1	4W	3.84W			12V 5V	MYBSP01201ABFT MYBSP00502ABFT	
		2	7W	6.49W			12V 5V	MYBSP01201ABFU MYBSP00502ABFU	
PoE+ IEEE802.3at	Type2	4	30W	25.5W		35.5 x 22.4 x 10.55 mm	12V 5V	MYBSP0122BABFT MYBSP0055AABFT	• Low profile SMD type • Available continuous 25.5W at +85℃ • Low EMI : compliant with CISPR class B • 2250Vdc Input-Output Isolation • No External capacitor operation
PoE++ IEEE802.3bt	Type3	5	45W	40W		22.2 x 56.4 x 8.52 mm	12V	MYBSP0124CAZFT	• Support IEEE802.3bt/ PoE++ class6 • 2250Vdc Input-Output Isolation • Available PSE Indicator, Adapter-Oring • Operating Temperature : -40 to +85 °C
		6	60W	51W					
	Type4	7	75W	62W			12V	MYBSP01206AZFT	• Output Voltage Adjustable :+/-10% • 2250Vdc Input-Output Isolation • Available PSE Indicator, Adapter-Oring • Operating Temperature : -40 to +85 °C
		8	90W	71.3W					
PSE Boost-up	Type1 Type2	0-4	30W	25.5W		35.5 x 22.4 x 8.9 mm	54V/0.6A	MYBSS054R6EBF	• Low profile SMD type • Operating Temperature :-40 to +85℃ • Operations input from 10.8V to 27V • 2250Vdc Input-Output Isolation

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Low Power: Non-isolated Product Family

Family	Product Image	Description	Rating
UltraCP™		Used in 24V or 48V systems to improve system efficiency. Divides the high input voltage down to allow the POL to operate more efficiently. This is a virtually lossless DC transformer - only very small!	MYC0409 - 6A (72W)
FlexiCP™		Discrete charge pump IC with integrated FETs and controller for 2-cell, 3-cell, 12Vin and 48Vin application.	PE25203 - 4A (16W) PE25204 - 6A (72W) PE25200 - 10A (45W) PE25208 - 8A (240W) PE25213 - 10A
UltraBK™		Family of very low profile (2.1mm) POL with the world's highest efficiency. Single and dual output versions. Includes I2C.	MYTN - 4A MYTN - 6A
FlexiBK™		Discrete buck regulator IC with capacitive based 2 stage architecture for 2-cell, 3-cell, 12Vin point-of load and 3.3Vin optical TRx application.	PE24101/102 - 6A PE24108 - 10A PE24110 - 12A PE24111 - 20A
MonoBK™		Fully integrated buck regulator for 12Vin or 5Vin point-of load application.	2.5A, 3.5A, 4A, 6A, 8A, 10A, 12A, 16A, 20A, 24A, 30A, 50A
PicoBK™		Tiny POL for battery powered applications such as wearable devices, optical transceiver, and SSD. All under 2mm height.	0.15A, 0.8A(boost), 0.6A, 0.6A (wide input), 1.0A, 1.5A, 2.0A

Click ratings for landing page

UltraCP™ series low-profile module, charge pump

FlexiCP™ series discrete, charge pump IC

UltraBK™ series low-profile, 2-stage buck

FlexiBK™ series discrete, 2-stage buck

MonoBK™ series high power density

PicoBK™ series ultra-small form-factor

Select for Landing Pages

Point-of-Load Selector Guide on Next Page

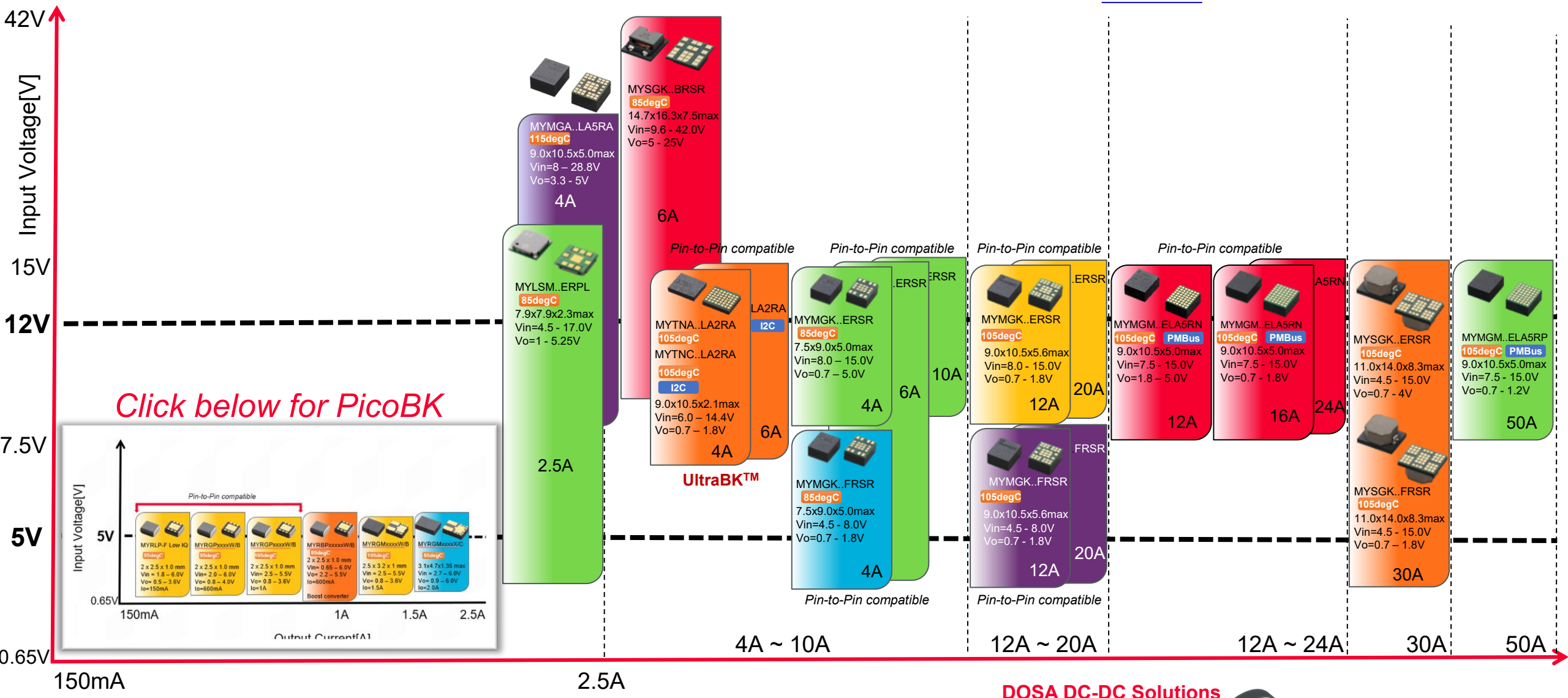
© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

Point-of-Load DC-DC line-up

A Brief Introduction to PMbus®



DOSA DC-DC Solutions on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

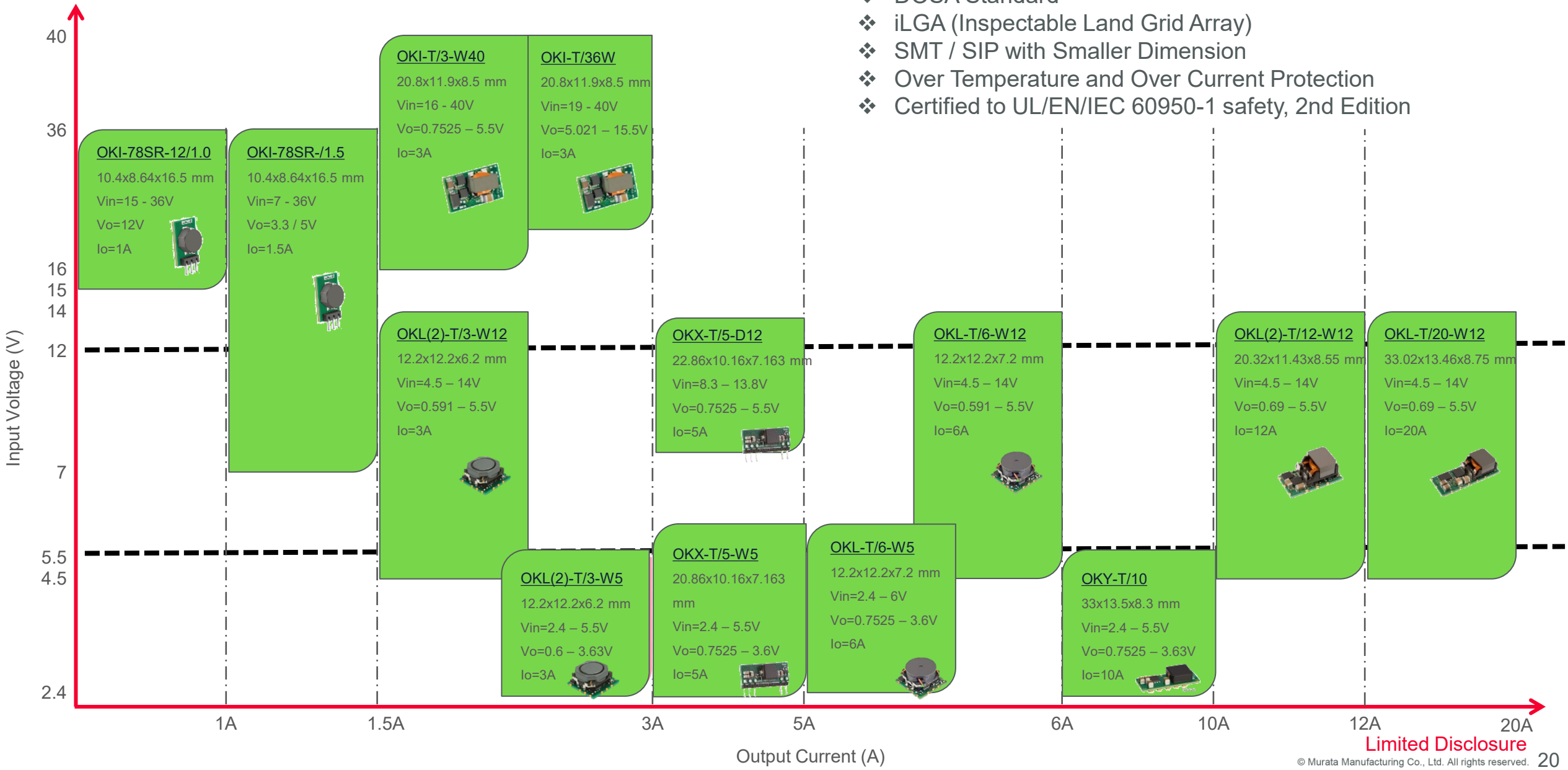
BACK

Click each image for datasheet

Non-isolated DC-DC line-up

OK Series

- DOSA Standard
- iLGA (Inspectable Land Grid Array)
- SMT / SIP with Smaller Dimension
- Over Temperature and Over Current Protection
- Certified to UL/EN/IEC 60950-1 safety, 2nd Edition



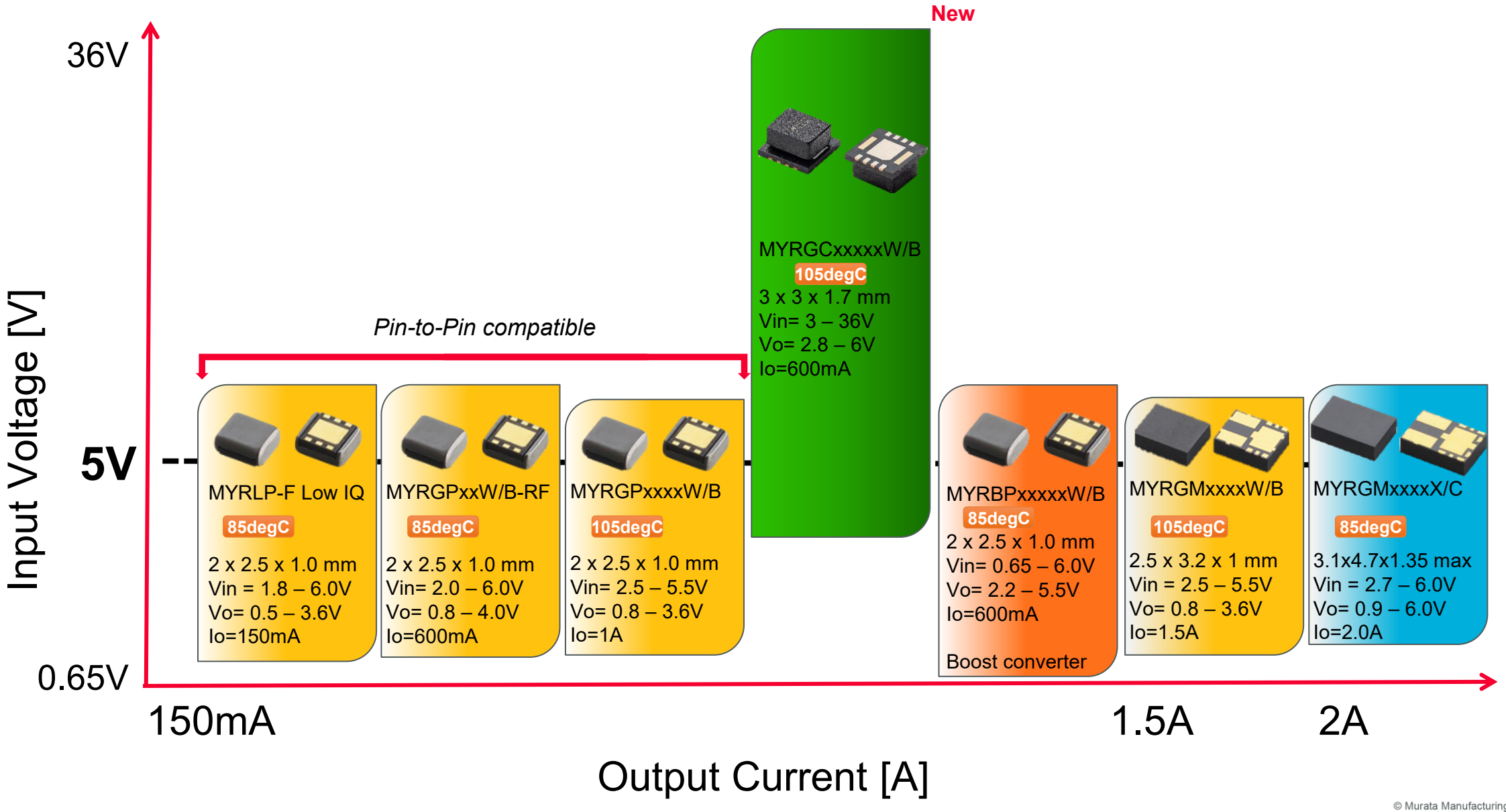
Limited Disclosure

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

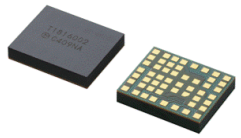
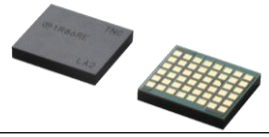
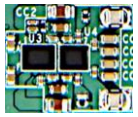
Point-of-Load DC-DC line-up



© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Non-Isolated DC-DC – Charge Pump & 2-stage Buck

Family	Product Image	Description
UltraCP™		Used in 24V or 48V systems to improve system efficiency. Divides the high input voltage down to allow the POL to operate more efficiently. This is a virtually lossless DC transformer - only very small!
FlexiCP™		Discrete charge pump IC with integrated FETs and controller for 2-cell, 3-cell, 12Vin and 48Vin application.
UltraBK™		Family of very low profile (2.1mm) POL with the world's highest efficiency. Single and dual output versions. Includes I2C.
FlexiBK™		Discrete buck regulator IC with capacitive based 2 stage architecture for 2-cell, 3-cell, 12Vin point-of load and 3.3Vin optical TRx application.

Select for Landing Pages

UltraCP™ series low-profile module, charge pump – click for data sheets → **6A**

Application Notes
Differences between conventional charge pump circuit and Murata's charge pump click for App Note
Current sharing for 48V input voltage charge pump module, MYC0409-NA click for App Note

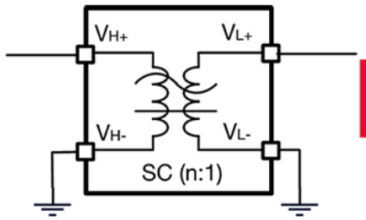
FlexiCP™ series discrete, charge pump IC - click for data sheets → **4A**, **6A**, **10A**, **8A**

UltraBK™ series low-profile, 2-stage buck – click for data sheets → **4A**, **6A**

FlexiBK™ series discrete, 2-stage buck – click for data sheets → **6A**, **10A**, **12A**, **20A**

Characteristics of Murata's Charge Pump

Power Products
UltraCP™
Power Products
FlexiCP™

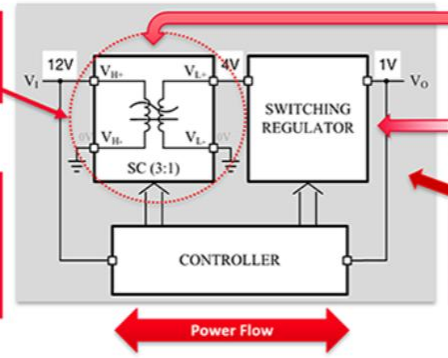


Think of it as a virtually lossless DC transformer.... only very small...

Power Products
UltraBK™
Power Products
FlexiBK™

Virtually lossless stage irrespective of conversion ratio!

Efficiency is largely independent of the difference between input and output voltage.



Capacitors do most of the work, enabling greatly reduced inductor sizing.

Uses low voltage FETs throughout the power train. Built on standard CMOS.

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for datasheet

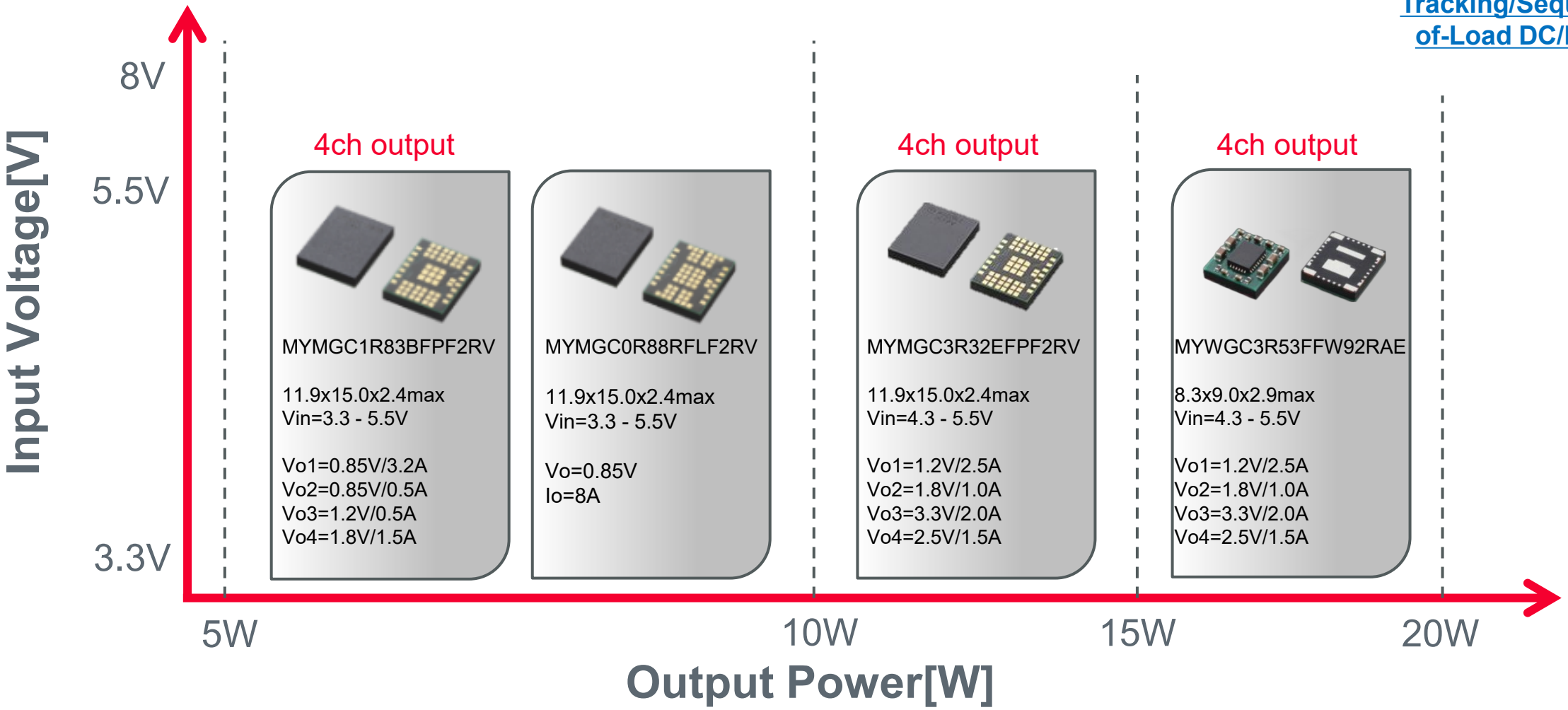
Point-of-Load DC-DC Line-up for FPGA, DSP, ASIC

Power Products

Application Notes

Tracking/Sequence for Point-of-Load DC/DC Converters

- MonoBK™ for FPGA, DSP, ASIC



© Murata Manufacturing Co., Ltd. All rights reserved.

Murata Power Solutions by Application

Healthcare & Medical



Robotics



Server, Storage, Networking



Artificial Intelligence (AI)



Automatic Test Equipment



Rail & Transportation



EV Charging



Solar & Energy Storage



RF Power Amplifier



Optical Transceivers



Digital Panel Meters

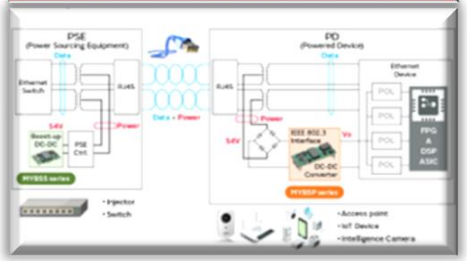


To be Discontinued

Power Magnetics



Power Over Ethernet (PoE)

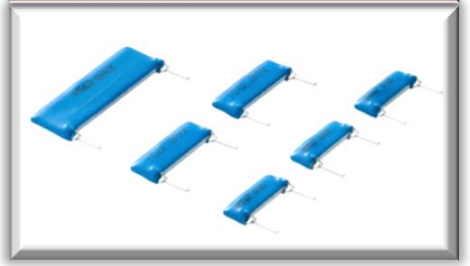


Air Purifier – Ionizers



To be Discontinued

High Voltage Resistors



© Murata Manufacturing Co., Ltd. All rights reserved.

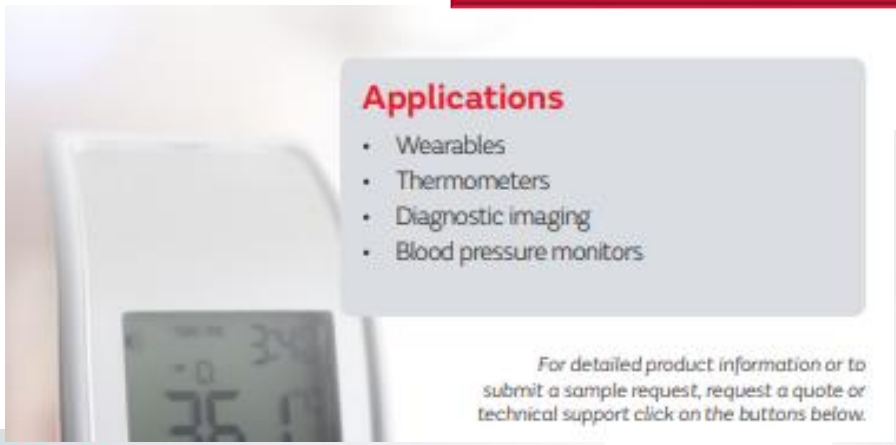
Healthcare & Medical // Applications

click to view article

Considerations in Choosing a Medical AC-DC Power Supply

Click for brochure





Applications

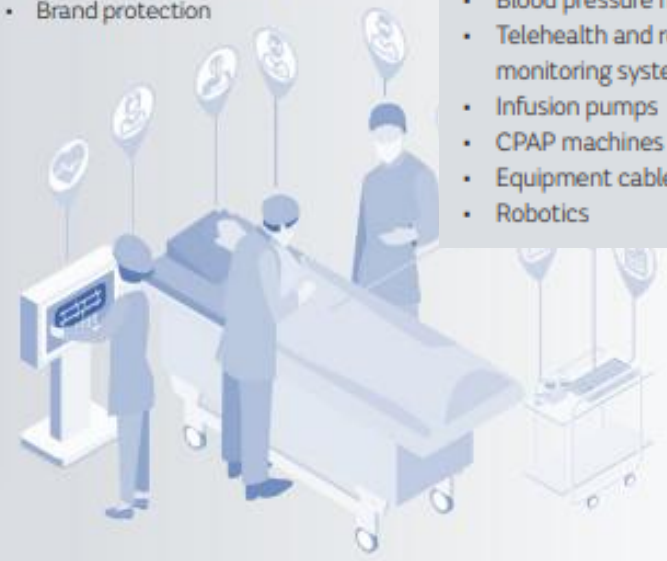
- Wearables
- Thermometers
- Diagnostic imaging
- Blood pressure monitors

For detailed product information or to submit a sample request, request a quote or technical support click on the buttons below.



Applications

- Inventory Management
- Surgery tool management
- Drug authentication
- Medication control system
- Asset Management
- Consumable product validation
- Brand protection



Applications

- MRI
- X-Ray
- Ultrasound
- Blood pressure monitors
- Telehealth and remote health monitoring systems
- Infusion pumps
- CPAP machines
- Equipment cable isolation
- Robotics

Applications

- Ventilators
- Ultrasound monitors
- ECG equipment
- Hospital beds
- Surgical lights
- Sphygmomanometers
- Incubators

Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Healthcare & Medical // Power Solutions

250W PSU



PQC250W Series

- Designed to comply with IEC60601-1-2 4th Edition EMC Standard Requirements
- 4.5M hours MTBF

600/350W PSU

Type BF



PQC600W Series

- Designed to comply with IEC60601-1-2 4th Edition EMC Standard Requirements
- 2.2M hours MTBF

650W/450W PSU

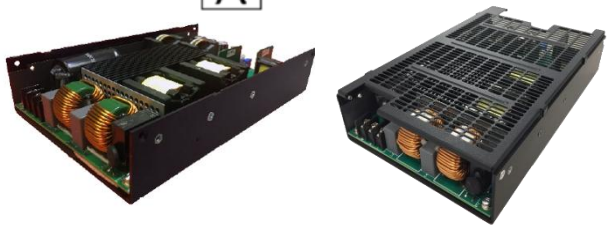
Type BF



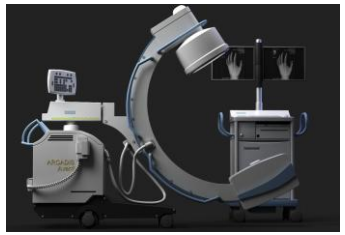
PQU650M Series

1,000W/800W PSU

Type BF



PQU1000 Series

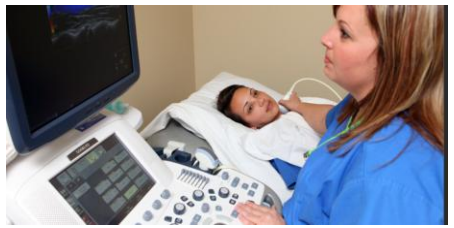


















Isolated DC-DC
1W and 2W
Single & Dual Outputs
Regulated & Unregulated



NXE1 Series



NXJ1 Series



NXE2 Series



NXJ2 Series



MEJ1/2 Series

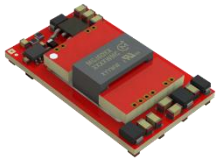


MTC1/2 Series

Isolated Gate Drive Solutions
1W to 6W
Optimized bipolar output voltages for IGBT/SiC & MOSFET gate drives



MGJ1 Series



MGJ6 Low Profile Series

© Murata Manufacturing Co., Ltd. All rights reserved.



E-Mobility & EV Charging

Murata Power Technologies enabling application solutions for EV charging stations





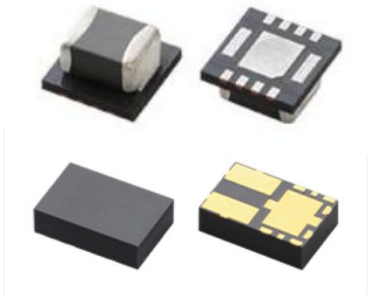


Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

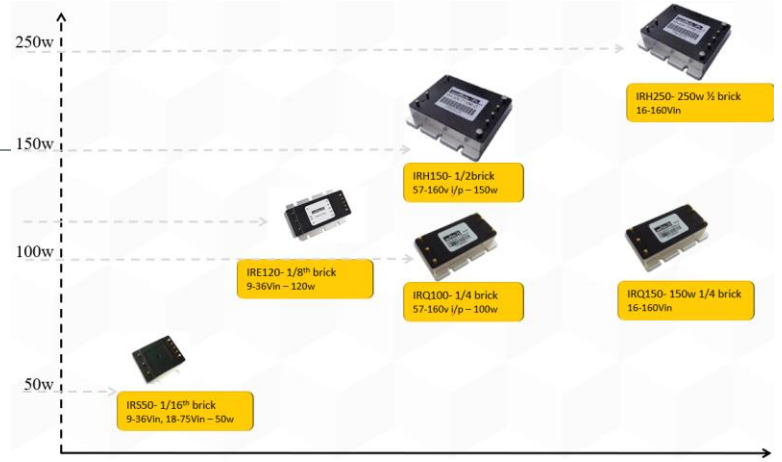
Automotive & EV Charging // Power Solutions



The MYR series
Non-Isolated DC-DC converter
12Vin/24Vin







Ruggedized
DC-DC (IR Series)

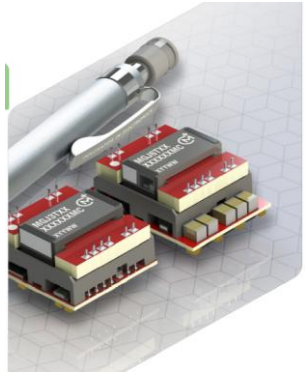
PicoBK™ (Smaller POL)
Inductor Built-in Step-down Regulator
Inductor Built-in Step-up Regulator
Inductor Built-in Negative Output Voltage Regulator







MYM/MYS series
Non-Isolated DC-DC converter



MGJ/MGN Series
Isolated DC-DC converter for gate drive
Power rating: 1-6W

MonoBK™ (Small POL)
Small Step-down Regulator molded with resin
Fast transient
Low noise
Input voltage: 3.3V to 42V
Output voltage: 0.7V to 25V
Output current: 2.5A to 40A

Product News



MGJ1T series Isolated DC-DC
6kVDC isolated 1W
block-coil transformer technology
Ultra low isolation capacitance 2.5pF
Low profile

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Target Application – Alternative Energy

Alternative energy

- Battery energy storage systems
- Tidal power
- Bi-directional EV Charging
- Micro grid
- Heat pumps



FOCUS PRODUCTS							
Key parameters	NXJ1T	MGN1	MGJ1V	MGJ1/MGJ2	MGJ2	NXE/NXJ	MGJ3/MGJ6
Product image	 New						
Continuous barrier withstand voltage		1.1kV	1.5kV	2.5 - 3kV	2.4kV	1kV	3kV
Isolation capacitance	2.5pF (Typ)	2.5pF (Typ)	2.5pF	3pF (Typ)	3- 4pF (Typ)	2 – 3pF	13 - 15pF (Typ)
Safety approvals	Reinforced – 200Vrms Basic - 250Vrms	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250VAC	Reinforced – 150Vrms Basic – 200 to 300Vrms	Reinforced -125 to 250Vrms Basic - 250Vrms	Reinforced - 250VAC to 690Vrms
CMTI		>200kV/µs	>200kV/µs	>200kV/µs	>200kV/µs		>200kV/µs
Operating temperature	-40 up to 125ºC	-40 up to 105ºC	-40 to 105ºC	-40 up to 105ºC	-40 up to 105ºC	-40 up to 110ºC	-40 up to 105ºC
Power	1W	1W	1W	1W – 2W	2W	1W-2W	3W – 6W

Limited Disclosure
© Murata Manufacturing Co., Ltd. All rights reserved.

muRata

INNOVATOR IN ELECTRONICS

Servers



Storage Systems



Network Switch



Open Compute Project

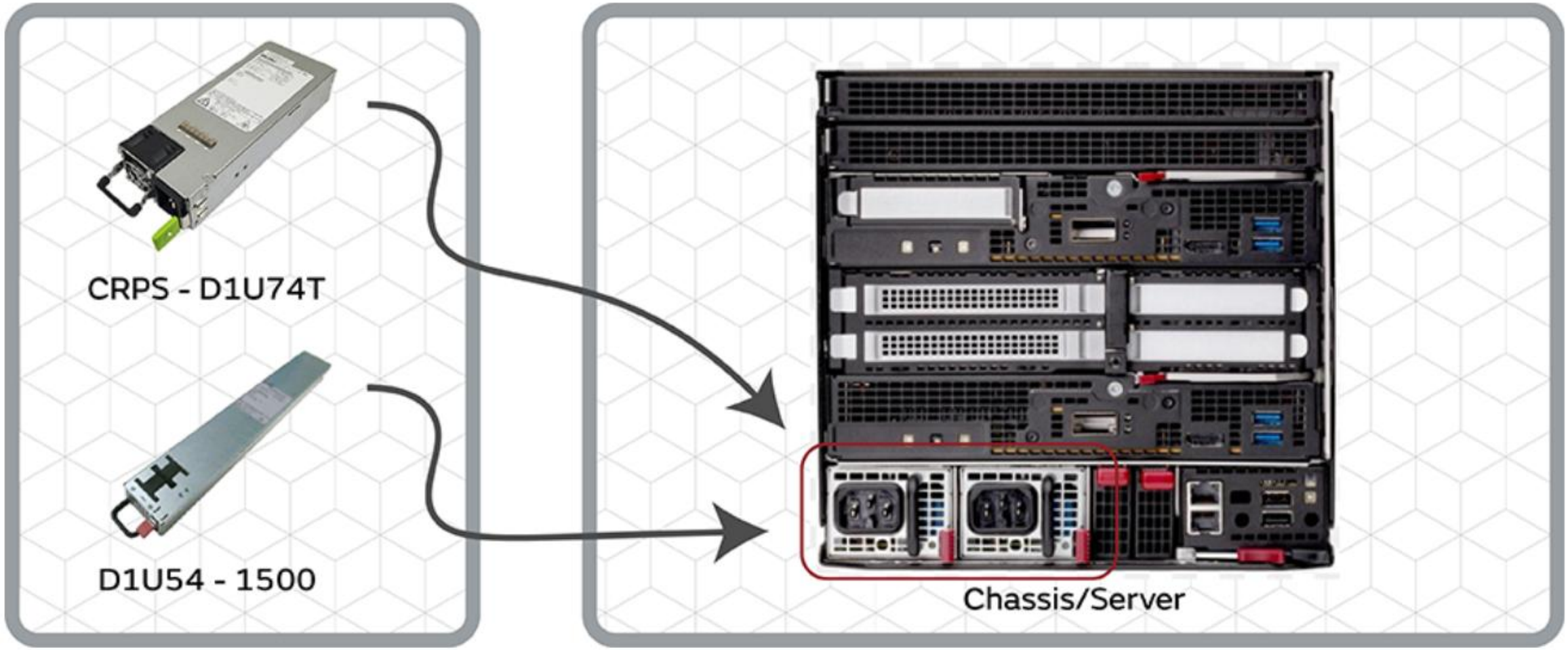


Open Compute and Datacenter Power Solutions

Products on Next Page

BACK

Hot Swappable N+1 Redundant Front-End Power Supplies

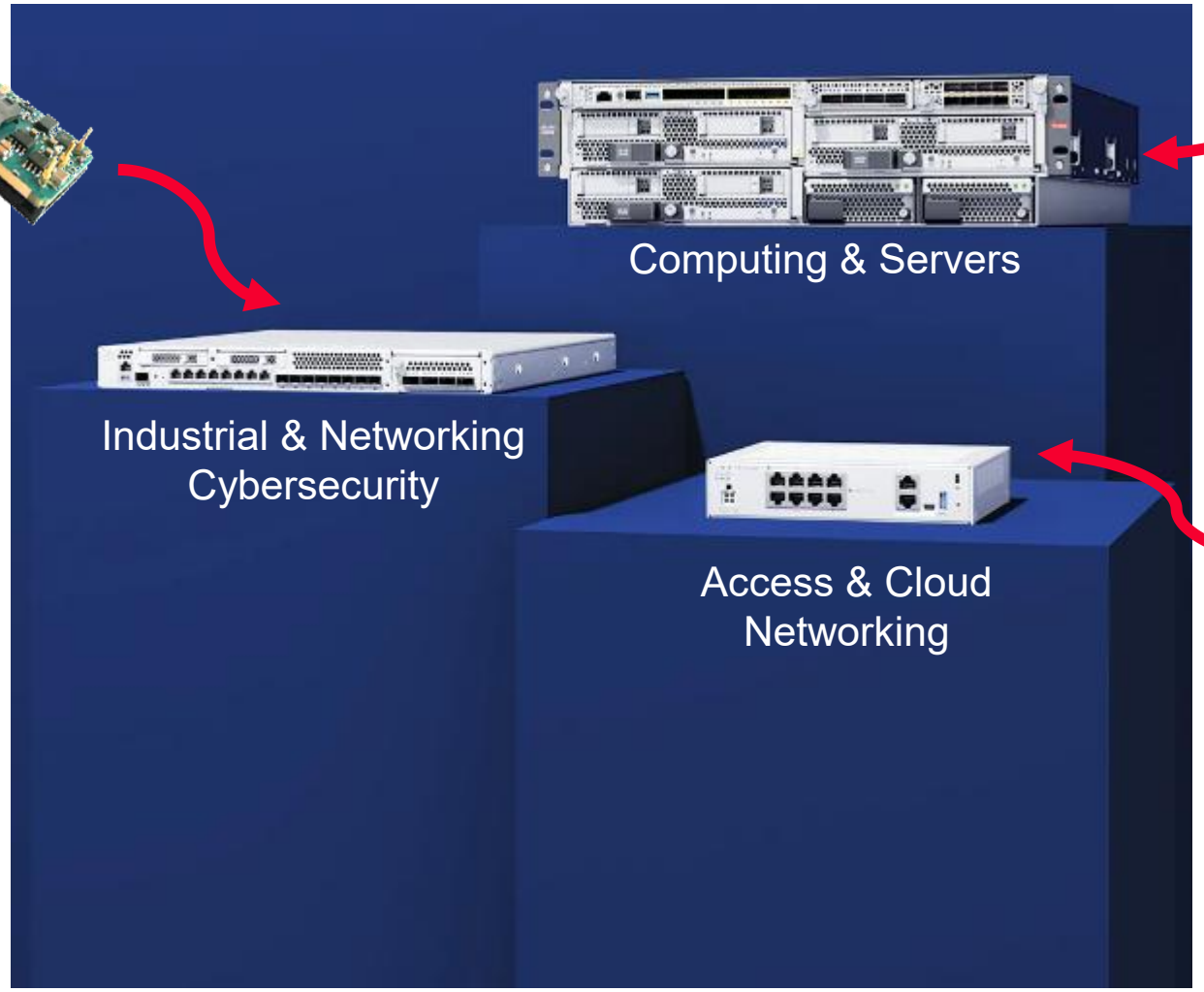


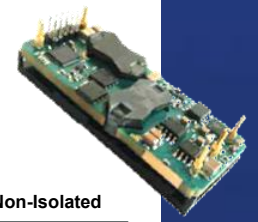
DC-DC products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Isolated & Non-isolated DC-DC Power Supplies





Non-Isolated

MPE800
1/8 brick
Single output
Vin=36-60V

Vo = 12V (800W)

PMBus RoHS

85˚C



Parallel Operation

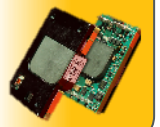


MPQ1500
1/4 brick
Single output
Vin=36-60V

Vo = 12V (1,500W)

PMBus RoHS

500V I/O 85˚C



Parallel Operation



ULS Series
1/16 brick
Single output
Vin=36-75V

Vo = 3.3V
Vo = 5V
Vo = 12V
(100W)

DOSA RoHS

2.25KV I/O 85˚C



Selector Guide on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Data Center & Enterprise Computing

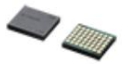
Server





› **AC-DC Converter 1U Frond End**

D1U Series

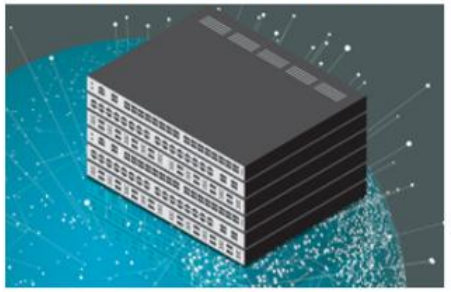


› **Non-Isolated DC-DC Converters**

MYTN Series

Data Center & Enterprise Computing

Network switch





› **AC-DC Converter 1U Frond End**

D1U Series

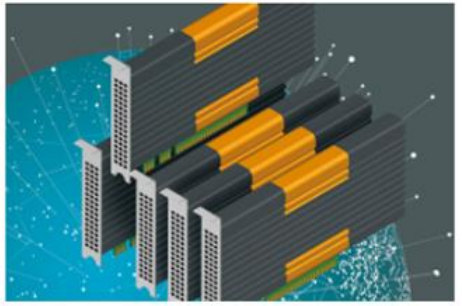


› **Isolated DC-DC Converters for PoE+PD**

MYBSP Series

Data Center & Enterprise Computing

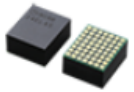
Hardware accelerator





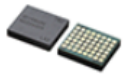
› **Non-Isolated DC-DC Converters**

MYMGK Series



› **Non-Isolated DC-DC Converters**

MYMGM Series

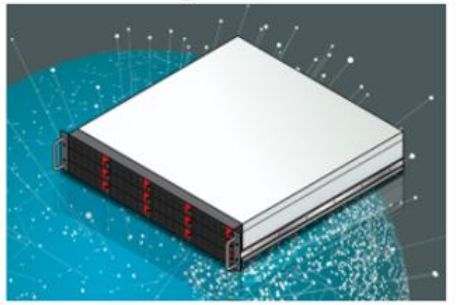


› **Non-Isolated DC-DC Converters**

MYTN Series

Data Center & Enterprise Computing

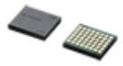
Storage system





› **AC-DC Converter 1U Frond End**

D1U Series



› **Non-Isolated DC-DC Converters**

MYTN Series



› **Non-Isolated DC-DC Converters**

MYMGK Series

Power Products

Regulated DC-DC Power Converters

click for Landing page → **DC-DC Power Converters**

Isolated Board Mount DC-DC

- 15W to 1,500W, DOSA bricks, PMBus
- Vin range covering 9 – 160Vdc “Universal Input”
- 3.3V to 54Vout



More Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK Click each image for product offering

Highly Differentiated AC-DC (& DC -48V input) Offering

Efficient

D1U54



- 80Plus Platinum
  - 94%
- 80Plus Titanium
  - 96%
  - 17 Approved Products
    - Highest in Industry
- GaN Technology
- 54mm wide Leader
  - 50 released models

Server, Storage, Networking, Optical

Dense

D1U86



- Up to 53W/in^3 common slot 800W up to 1,600 W
- Reached the highest density in the industry

Server, Storage, Networking, Optical

CRPS Form Factor

D1U74



- Up to 97W/in3
- Common CRPS form factor
- 2,700W reached the highest density & efficiency in the industry
- 1,600W
- 3,200W
- 54Vdc 3,200 M-CRPS

Datacenter/Server, Cybersecurity

Flexible

MWOCP74



- Configurable solutions to +33KW
- Multi-input AC
  - 90-305Vac
  - 240Vdc
  - 380Vdc
- Multiple Output Options
  - 12Vdc, 50.5Vdc, 54.5Vdc
  - ORV1, ORV2, ORV3
- Hot Swap, Redundant

AI & Datacenter

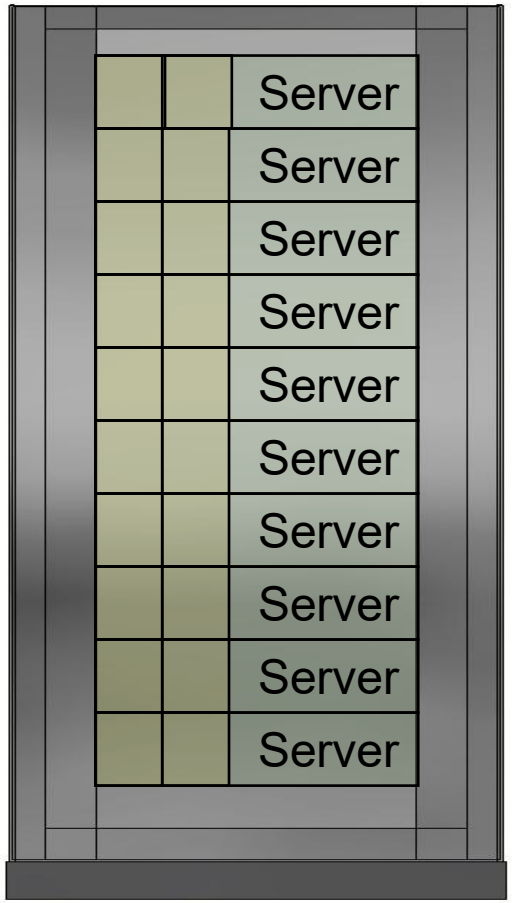
More Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

OCP Centralized Power System

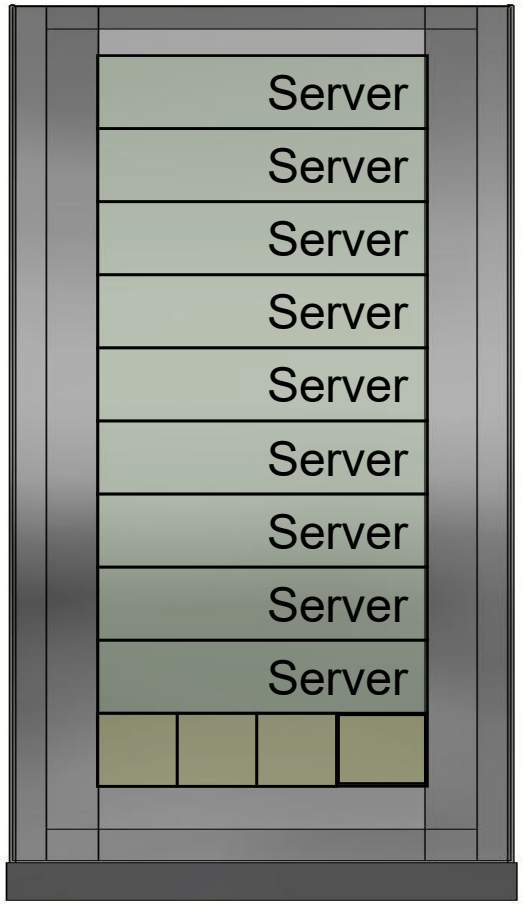
Traditional



- Each server has its own PSUs.
  * Redundancy requires N+N PSU's for N servers.
- PSU Efficiency is lower because of low load ratio

- Only one PSU per rack (N+1) is needed for redundancy
- PSU Efficiency is higher because of higher load ratio.

Centralized



:PSU

Data Center & Open Compute
Power Shelf click for Power Shelf
Data Center & Open Compute
PSU click for PSU

More Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Basic Product Lineup



Power Supply Unit (PSU)

Converts AC input voltage to DC output voltage



Power Shelf

Metal shelf for housing PSU, RMU



Remote Management Unit (RMU)

Controls and monitors the unit inside the shelf
Interface of power system



Input Cable

Connect between the power shelves and DC facility to provide AC power to the power shelves



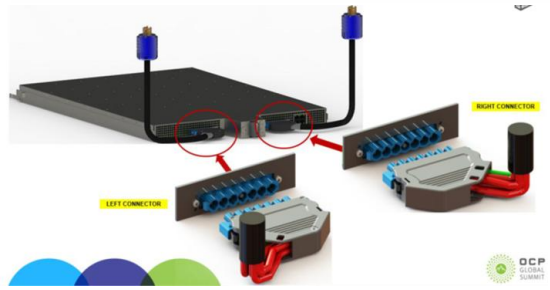
Mounting KIT

Power shelves can be installed to the rack

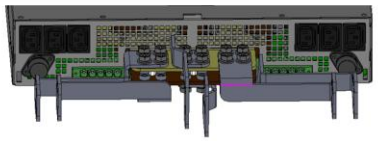
Select Images for Landing Pages

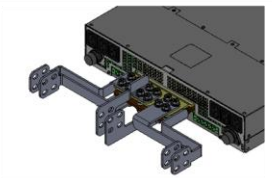




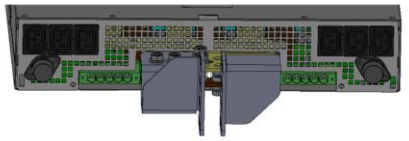


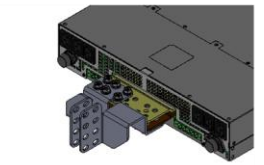
V1 or V2 rack – 3 busbars





V2 rack – 1 busbar





© Murata Manufacturing Co., Ltd. All rights reserved.

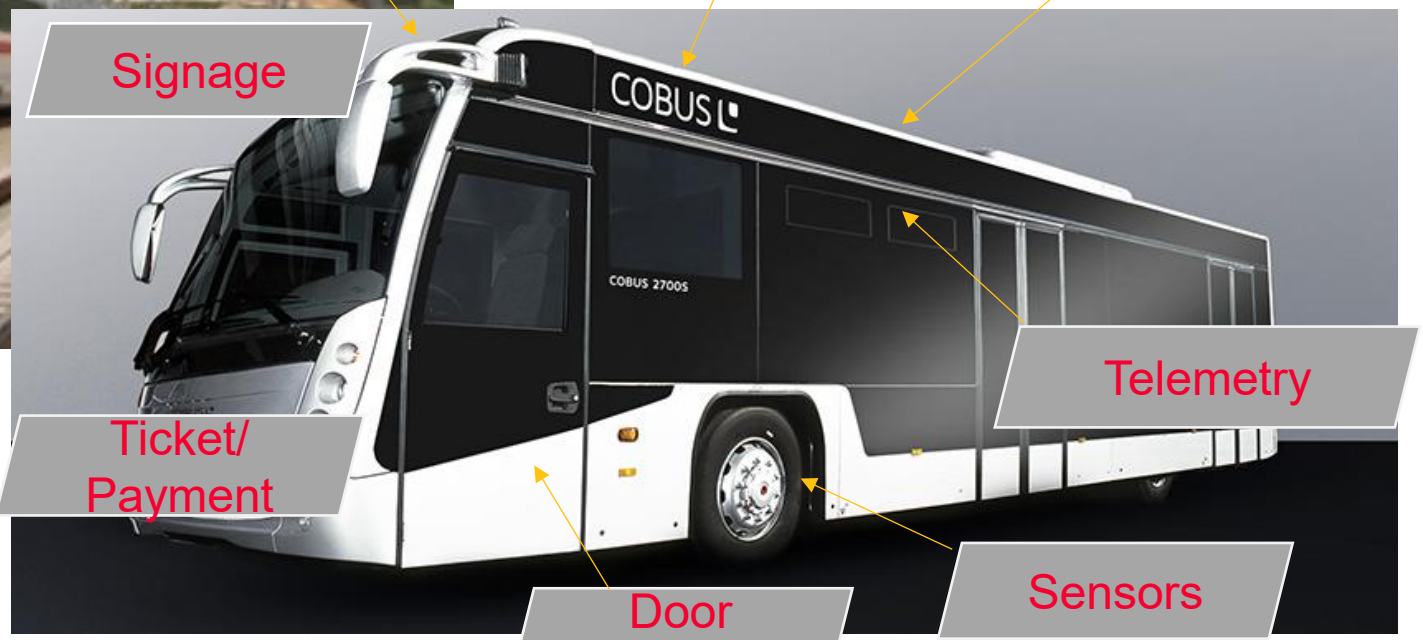
Railway & Bus Transit Applications



Driver's Cabin
- Cab radio
- Displays
- CCTV
- Wiper
- Headlights

Track Side
- Signaling
- Level crossing
- Communication
- Lighting
- Thermal rail

Propulsion
- Braking
- Axle monitor
- Drive control
- PTC
- Sensors



WiFi
Communication
Lighting
Signage
Telemetry
Ticket/ Payment
Door Control
Sensors

Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Ultra-wide (10:1) input chassis mount DC-DC converters

By utilizing proprietary technologies and our component selection process, Murata has developed a range of ultra-wide (10:1) input voltage ratio DC-DC converters, in both component "brick" style format and stand-alone fully EN50155 compliant and chassis mount solutions.

Products support EN50155:2017

Nominal input	Variation range of nominal input (0.7-1.25 x Vin)	Brownout 100ms (0.6 x Vin)	Transient 1s (1.4 x Vin)
24V	16.8V – 30V	14.4V	33.6V
28V	19.6V – 35V	16.8V	39.2V
36V	25.2V – 45V	21.6V	50.4V
48V	33.6V – 60V	28.8V	67.2V
72V	50.4V – 90V	43.2V	100.8V
96V	67.2V – 120V	57.6V	134.4V
110V	77V – 137.5V	66V	154V

NEW





IRV300 series

- 16V – 160V DC input
- 12V, 24V, 48V/54V @ 300W outputs
- Compliant to
  - EN50155
  - EN45545
  - EN50121
- Environmentally qualified
- -40°C to +70°C operating (+85°C for 10 minutes)
- Optional holdup, parallel functions
- Connector kit available

Models	Vin Range (V)	Vout (V)	Iout (A)	Pout (W)	Vin Nom (V)	Package
IRV300-54W80xx-C	16-160	54/48	5.5	300	72	CHASSIS
IRV300-24W80xx-C	16-160	24	12.5	300	72	CHASSIS
IRV300-12W80xx-C	16-160	12	25	300	72	CHASSIS
IRV300-MCK	Mating connector kit IRV300 series					



IRH/IRQ W80 series

- 16V – 160V DC 10:1 input range
- 250W 1/2 brick or 150W 1/4 brick option
- Hold-up function pin
- -40°C to +100°C temperature range
- 12V, 24V, 48V/54V outputs
- Under voltage lockout fea[illegible]e
- Remote sense
- ±10% adjustment range
- Extremely high efficiency
- EN50155 compliant

Models	Vin Range (V)	Vout (V)	Iout (A)	Pout (W)	Vin Nom (V)	Package
IRH-54/4.7-W80xx-C	16-160	54	4.7	250	72	1/2 BRICK
IRH-24/10.5-W80xx-C	16-160	24	10.5	250	72	1/2 BRICK
IRH-12/21-W80xx-C	16-160	12	21	250	72	1/2 BRICK
MP-HW80EVAL-01	16-160			250	72	1/2 BRICK



Models	Vin Range (V)	Vout (V)	Iout (A)	Pout (W)	Vin Nom (V)	Package
IRQ-24/6.25-W80xx-C	16-160	24	6.25	150	72	1/4 BRICK
IRQ-12/12.5-W80xx-C	16-160	12	12.5	150	72	1/4 BRICK
MP-QW80EVAL-01	16-160			150	72	1/4 BRICK



muRata

Isolated universal input DC-DC converters

UWS series



- 50W single output
- 1.3" x 0.9" x 0.36" 1/16th brick
- 3.3V, 5V & 12Vdc output
- Up to 89% efficient
- SMT and through hole models
- 18 - 75 Vin (Q48) range
- 2,250V input/output isolation, basic insulation

UWE series



- 120W single output
- 2.3" x 0.9" x 0.38" 1/8th brick
- 5V, 12V & 24Vdc output
- Up to 92% efficient
- 9 - 36 Vin (Q12) range
- 1,500V & 2,250V input/output isolation, basic insulation

User Guide for MP-QW80EVAL-01 Evaluation Board

User Guide for MP-HW80EVAL-01 Evaluation Board



Evaluation boards

- EMC filtering (EN50155)
- Output adjustment
- Cage clamp connectors
- LED indication
- Remote on/off
- Full signals interfacing
- Hold-up

Click each image for product offering

© Murata Manufacturing Co., Ltd. All rights reserved.

Robotic Applications & Products





Medical / Health Care

- Medical machines, Ultrasound
- Battery powered devices

Warehouse

- Humanoid Robots
- Robotic equipment
- Charging systems – AC-DC and DC-DC options

Manufacturing, Industrial Automation

- Autonomous Guided Vehicles

Delivery Vehicles

- Last mile transit, drones

Cleaning Systems

- Autonomous vacuum systems









Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

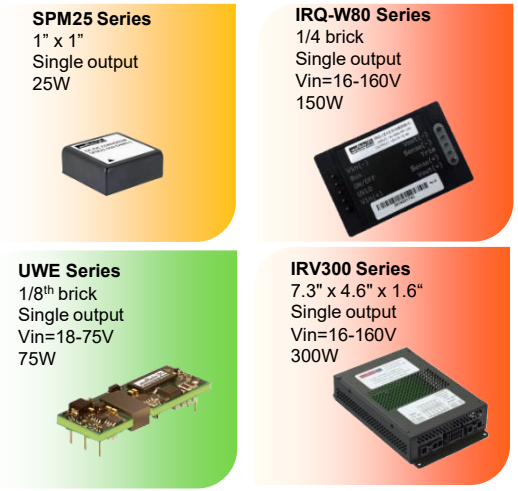
BACK

Click each image for product offering

Industrial & Robotics Power Solutions

Humanoid Robotics next page

High Power Density Isolated DC-DC



click here for product offering

- Vin range covering 9 – 160Vdc "Universal Input"
- 10W to 1,500W
- 1/32, 1/16, 1/8, 1/4, 1/2 & full bricks
- 1x1″, 1x2″ industrial

DSE, DAE & DCE Series

400W Digital Controlled 1/8 Brick



- Industry standard DOSA PMBus compliant
  - DSE - DOSA, W / PMBus, sense & trim
  - DAE - DOSA, W / sense & trim
  - DCE - DOSA 5 pin IBC
- Single outputs: 12V/33A
- 2:1 input voltage range: 36 – 75V
- High efficiency, typ. 95.5%
- 2250Vdc I/O isolation, with basic insulation

DSQ, DAQ & DCQ Series

600W Digital Controlled 1/4 Brick



- Industry standard DOSA PMBus compliant
  - DSQ - DOSA, W / PMBus, sense & trim
  - DAQ - DOSA, W / sense & trim
  - DCQ - DOSA 5 pin IBC
- Single outputs: 12V/50A
- 2:1 Input voltage range: 36 – 75V
- High efficiency, typ. 95.5%
- 2250Vdc I/O isolation, with basic insulation

Efficient 650W/450W

PQU650



Where we WIN!
450W no fan @50C
Fan/Cover Option

click here for data sheet

(cover kit)

- Fan less AC-DC in compact 4" x 6"
- Small derating at 70ºC

Industrial & Robotics

Industrial 1,000W/800W

PQU1000



800W Convection
Small 5" x 8" form factor

click here for data sheet

- Fan less AC-DC in compact 5" x 8"
- BF Rated
- 95% eff @ 50% load

Industrial & Robotics

Power Products

Regulated DC-DC Power Converters

click for Landing page → DC-DC Power Converters

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

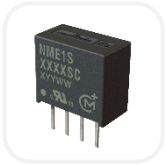
Powering The Rise of Humanoid Intelligence

Communications
UART, SPI, I2C, 1-Wire, CANBus and SPE


NXJ1T Series


NXJ1 Series


NTE Series


NME1 Series

BMS
(Battery Management System)


NXJ1T Series


NXJ1 Series


NMJ Series


NCM3 Series

Motor Drivers


MGN1 Series (GaN)


MGJ Range (1-2W)



Sensors
IMU, vision cameras, LiDAR, ultrasonic, infrared

DAQ
(Data Acquisition Module)


MYTN Series


ULS Series


UWS Series


MYC Series


MYM Series


MYRGM Series

Edge AI Compute

Compute

PDU
(Power Distribution Unit)


UWE Series


DSE Series


MPQ600 Series


MPS Series

© Murata Manufacturing Co., Ltd. All rights reserved.

RFPA (Radio Frequency Power Amplifiers) Applications

- Isolated DC-DC bricks for growing telecommunications and networking equipment needs.
- Designed to enable hardware engineers the flexibility to meet demanding system design goals, including:

- RF Power Amplifiers
- 5G base stations
- Wireless repeaters
- Distributed antenna systems
- Infrastructure point-to-point radios
- Networking equipment
- Public safety wireless equipment







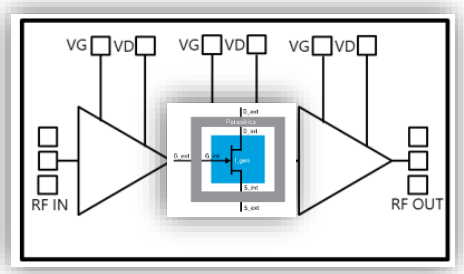
Applications on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Supporting RF Power Amplifier products…

GaN RF Power Amplifiers



5G base stations



Wireless repeaters



Infrastructure point-to-point radios



Networking equipment



Public safety wireless equipment



Cellular Distributed Antenna Systems (DAS)



Radar Systems



Radio Access Networking



Software Defined Radio (SDR)



Solutions on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Power Solutions to power GaN PA to the System Loads

DC Input

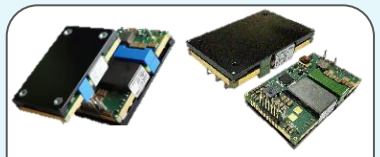


Fuel Cells
Batteries
Generators

DC-DC Power

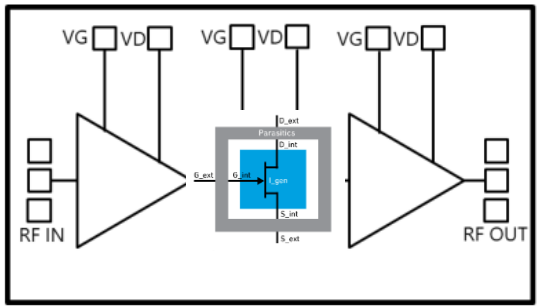
36 – 75V ➡ 14 - 55V

Isolated DC-DC
for GaN RF Amplifiers



600W & 700W

VD (drain voltage) = 28V or 50V



GaN RF Power Amplifiers

MICROCHIP

MACOM

QORVO QPD1026L

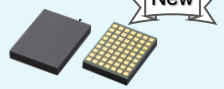
MPQ600 & MPQ700 On Next Page

Low-profile, 99% eff, charge pump

50V or 28V ➡ Div. 4

Non-Isolated

UltraCP™ New

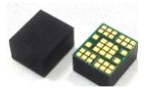


72W to 200W

Point-of-Load

5 to 12V ➡ 0.5 to 5V

MonoBK™



2.5A to 50A

UltraBK™ New



4A to 10A





© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

RF Power Amplifier, DOSA - PMBus DC-DC Converters

New!

MPQ600 Series

600W, RFPA 1/4 Brick

- Input Range of 36-75V, (48V nominal)
- Adjustable Output Voltage: 14-35V
- Optimized for 28Vout GaN Power Amplifier
- Efficiency up to 96.5%
- 2,250Vdc I/O isolation, with basic insulation
- Baseplate for Cooling Optimization

click for data sheet → MPQ600 Series



New!

MPQ700 Series

700W, RFPA 1/4 Brick

- Input Range of 36-75V, (48V nominal)
- Adjustable Output Voltage: 25-55V
- Optimized for 50Vout GaN Power Amplifier
- Efficiency up to 97.7%
- 2,250Vdc I/O isolation, with basic insulation
- Baseplate for Cooling Optimization

click for data sheet → MPQ700 Series



© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Power Magnetics



Inductors

Transformers

Common-Mode Chokes

Industrial Automation



Network Security & Infrastructure



Wind & Solar Inverters



MRI, PET, CT scan (X-Ray)



Robotics & Autonomous Vehicles



© Murata Manufacturing Co., Ltd. All rights reserved.

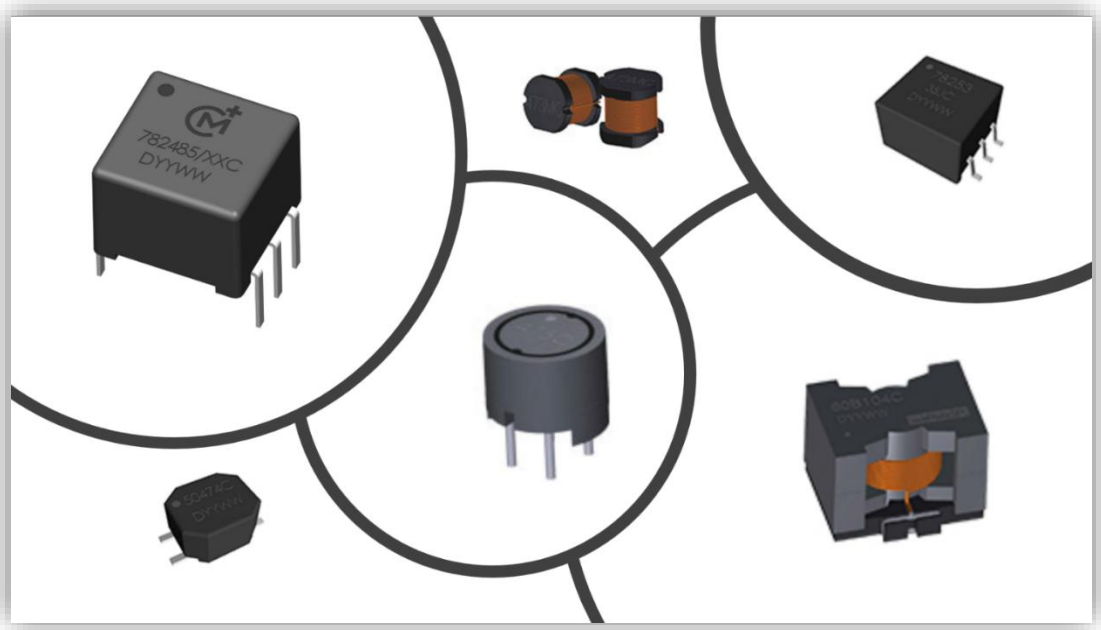
BACK

Magnetic Products

- Two essential elements of the vast majority of power electronics applications are filtering and isolation. Whether you need to reduce noise or protect vital components, Murata Power Solutions can offer a wide range of products to suit your requirements.

- With an emphasis on miniaturization, reliability and ease of handling, our designs are available in a variety of styles including bobbin, radial, axial and surface-mount.

  - • Inductors
  - • Pulse transformers
  - • Common-mode chokes
  - • Current sensing transformers
  - • Databus isolators
  - • Agency approved transformers
  - • Reference designs
  - • Custom designs



Brochure & Selector Guide on next page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Magnetic Products

Click for brochure





Inductor for Power Lines

Power Inductor Basic Course - Chapter 1

Contents

- 1.1 Overview of power inductors
- 1.2 Basic characteristics of power inductors
- 1.3 Types of power inductors
- 1.4 Power inductor selection issues

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

High Voltage Resistors

muRata
INNOVATOR IN ELECTRONICS



MHR Series

High Voltage Equipment



Printers, Copy Machines, Scanners



Grain & Moisture Testers



Dental X-Ray



PET, CT scan (X-Ray)



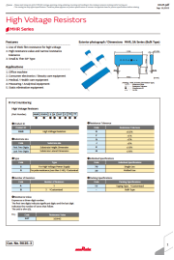
Luggage & Bag Scanner



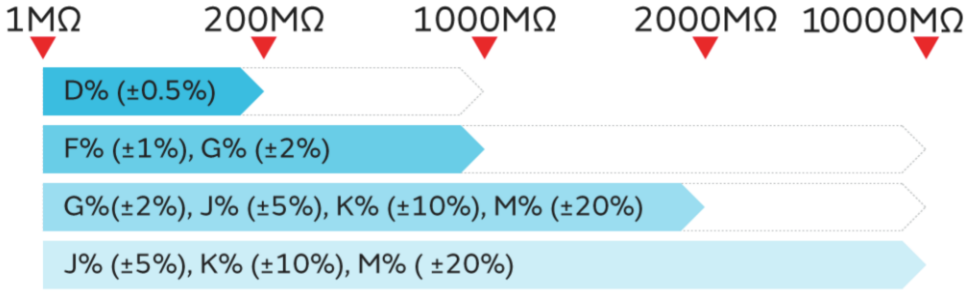
BACK

High Voltage Resistors

MHR Series
click for data sheet →



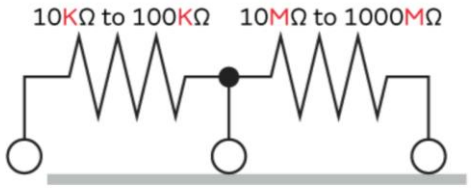
- Realizing Tight (Narrow) tolerance by Murata original thick film technology and resistor trimming technology.
- It's most suitable for high accuracy in the detection of voltage and current.

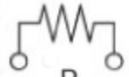


- Generally, it's used as a solid resistor for detection of voltage & current. We have a line up of Murata high voltage resistors that combines low resistance and high resistance in one package.







	High Voltage Power Supply (S-type)	
Appearance		
Circuit (number of element)	 R (1 element)	 R1 R2 (2 elements)
Resistance Range	1MΩ ~ 10GΩ	10MΩ ~ 1000MΩ
Resistance Tolerance	±0.5% ~ ±20%	±1% ~ ±20%
Maximum Operating Voltage	Single use 2 k VDC ~ 20kVDC Molded use 3kVDC ~ 35kVDC	Molded use 10 k VDC (0414SB type)
Wattage	0.3W ~ 2.5W	1.0W
Pakage	Bulk	Bulk

- Resistance (R) · rated voltage (E) · rated power (P) will be calculated from the following formula.

$$E = \sqrt{P \cdot R}$$

- When the rated voltage exceeds the maximum operating voltage, the maximum operating voltage will be the rated voltage.

BACK

Alternative Energy Storage & Solar PV Applications

- Why applications for gate drive
  - Alternative energy inverters
    - Wind, solar & battery backup
  - High and variable speed motor drives
  - Application specific technical requirements

Wind & Solar Systems



Motor Drive Systems



Battery Storage



Applications

Solar Inverters

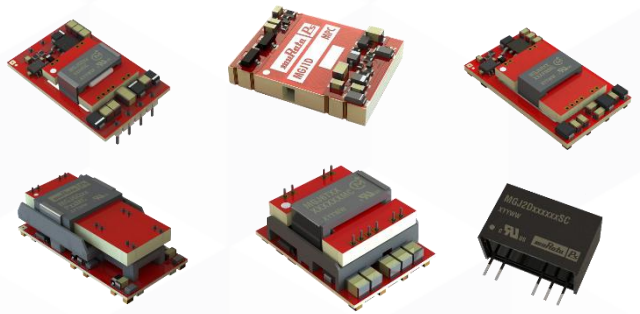
Motor Drives

Hybrid Electric Vehicles

Uninterruptible Power System

Induction Heating

DC-DC converters for IGBT or SiC gate drive



Target Applications next page

Copyright ©Murata Manufacturing Co., Ltd. All rights reserved. 7/27/2026
Confidential

muRata
INNOVATOR IN ELECTRONICS

BACK

Click each image for product offering

Target Application – Gate Drive

Why applications for gate drive

- Alternative energy inverters
  - Wind, solar & battery backup
- High and variable speed motor drives
- Application specific technical requirements – Key parameters



FOCUS PRODUCTS						
Key parameters	MGN1	MGJ1V	MGJ1/MGJ2	MGJ2	NXE/NXJ	MGJ3/MGJ6
Product image						
Continuous barrier withstand voltage	1.1kV	1.5kV	2.5 - 3kV	2.4kV	1kV	3kV
Isolation capacitance	2.5pF (Typ)	2.5pF	3pF (Typ)	3- 4pF (Typ)	2 – 3pF	13 - 15pF (Typ)
Safety approvals	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250VAC	Reinforced – 150Vrms Basic – 200 to 300Vrms	Reinforced -125 to 250Vrms Basic - 250Vrms	Reinforced - 250VAC to 690Vrms
CMTI	>200kV/µs	>200kV/µs	>200kV/µs	>200kV/µs		>200kV/µs
Operating temperature	-40 up to 105ºC	-40 to 105ºC	-40 up to 105ºC	-40 up to 105ºC	-40 up to 110ºC	-40 up to 105ºC
Power	1W	1W	1W – 2W	2W	1W-2W	3W – 6W

Target Applications next page

Limited Disclosure
© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Target Application – Alternative Energy

Alternative energy

- Battery energy storage systems
- Tidal power
- Bi-directional EV Charging
- Micro grid
- Heat pumps



FOCUS PRODUCTS							
Key parameters	NXJ1T	MGN1	MGJ1V	MGJ1/MGJ2	MGJ2	NXE/NXJ	MGJ3/MGJ6
Product image	 New						
Continuous barrier withstand voltage		1.1kV	1.5kV	2.5 - 3kV	2.4kV	1kV	3kV
Isolation capacitance	2.5pF (Typ)	2.5pF (Typ)	2.5pF	3pF (Typ)	3- 4pF (Typ)	2 – 3pF	13 - 15pF (Typ)
Safety approvals	Reinforced – 200Vrms Basic - 250Vrms	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250Vrms Basic - 650Vrms	Reinforced - 250VAC	Reinforced – 150Vrms Basic – 200 to 300Vrms	Reinforced -125 to 250Vrms Basic - 250Vrms	Reinforced - 250VAC to 690Vrms
CMTI		>200kV/µs	>200kV/µs	>200kV/µs	>200kV/µs		>200kV/µs
Operating temperature	-40 up to 125ºC	-40 up to 105ºC	-40 to 105ºC	-40 up to 105ºC	-40 up to 105ºC	-40 up to 110ºC	-40 up to 105ºC
Power	1W	1W	1W	1W – 2W	2W	1W-2W	3W – 6W

Gate Drive Selector Guide next page

Limited Disclosure
© Murata Manufacturing Co., Ltd. All rights reserved.

PowerAid — Low Power DC-DC Converters- Single & Dual Output

GATE DRIVE

click product images for data sheet

5.2kV(+) Isolation

Continuous Barrier Withstand Voltage 3kV

MGJ1 Series

Vin	Vout
5V	15/-3V
12V	15/-5V
15V	15/-9V
24V	19/-5V



1W — SMD

MGJ1T Series

Vin	Vout
12V	15/-3V
15V	15/-5V
24V	18/-2.5V



New

1W - Continuous barrier withstand voltage 2.2KV — SMD

MGJ1V Series

Vin	Vout
12V	15/-3V
15V	15/-5V
24V	18/-2.5V



1W - Continuous barrier withstand voltage 1.5KV — SMD

MGN1

Vin	Vout
5V	8V
12V	12V
	+6/-3V



1W - Continuous barrier withstand voltage 1.1kV — SMD

MGJ2 Surface Mount Series

Vin	Vout
12V	15/-5V
15V	15/-9V
	20/-5V



2W - Continuous barrier withstand voltage 2.5KV — SMD

MGJ2 Series

Vin	Vout
5V	15/-3V
12V	15/-5V
15V	15/-8.7V
24V	15/-15V
	See datasheet



2W - Continuous barrier withstand voltage 2.4KV — SIP7

MGJ3 Series

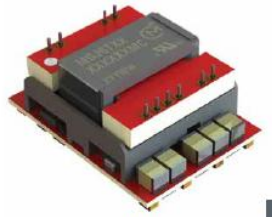
Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



3W — SMD

MGJ6 Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W — SMD

MGJ6 Low Profile Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W

MGJ6 SCDC Series

Vin	Vout
12V	15/-5V
24V	15/-10V
	20/-5V



6W — SIP / DIP

NXE1 Series

Vin	Vout
3.3V	3.3V
5V	5V



1W — SMD

NXE2 Series

Vin	Vout
5V	5V
12V	12V



1W — SMD

NXJ1 Series

Vin	Vout
3.3V	3.3V
5V	5V
12V	12V
	15V



1W - Continuous barrier withstand voltage 1KV — SMD

NXJ2 Series

Vin	Vout
5V	5V
12V	12V
24V	15V

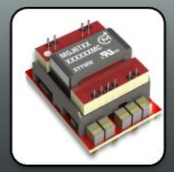


2W - Continuous barrier withstand voltage 1KV — SMD

Brochures on next page

BACK

Murata Power Solutions – Product Offering



Isolated Gate Drive Power

- Bipolar Voltages Gate Drives
- (1W – 6W)



Isolated DC-DC

- Isolated DC-DC
- (1W to 6W)



Magnetics

- Common Mode Chokes, EMI filters, Coils
- Inductors, Ferrite beads

Murata Power Solutions
click for brochures







NCL Products – Milton Keynes, UK

Copyright © Murata Manufacturing Co., Ltd. All rights reserved.

Blockchain & Artificial Intelligence (AI)

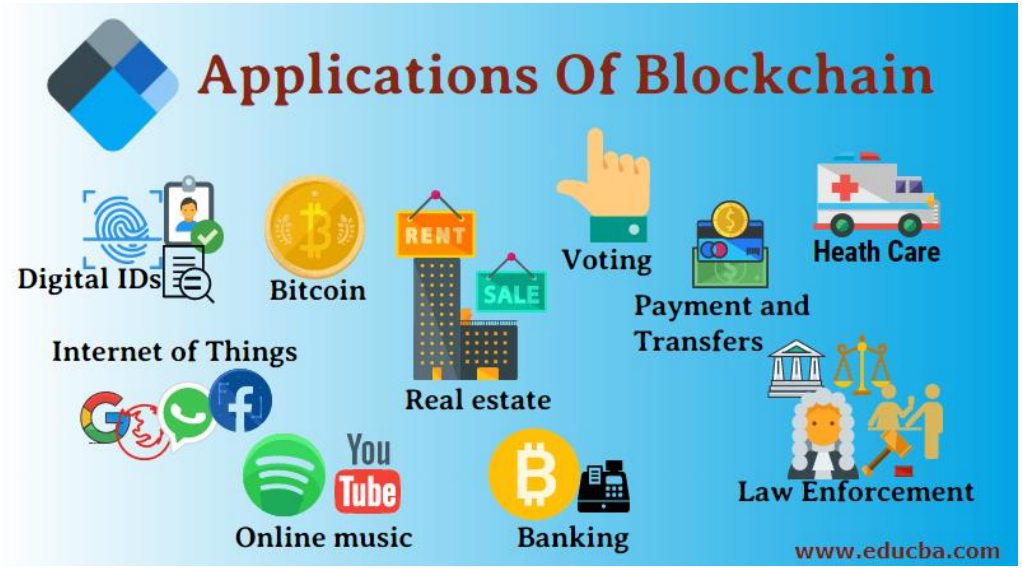
Blockchain

- Bitcoin Mining and Crypto Mining
- Bitcoin ATMs

Artificial Intelligence

- Machine Learning
- Deep Learning
- Predictive Analysis
- Automation

AI and blockchain are two technologies that are changing the way we live and work, and with companies like Murata leading the way in energy-efficient products, the future looks bright!



Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Power Products for Blockchain & AI

Enclosed AC-DC Power Supplies

- D1U54 Slim AC-DC Distributed Power Front Ends
- D1U86 AC-DC Power Front Ends
- D1U74 CRPS AC-DC Distributed Power Front Ends
- D1U68T AC-DC Front End Power Module

OCP Series Chassis Mount

- 21” OCP and 19” EIA rack widths
- Open Rack V1 & V2 (41OU) Equipment Racks

PSU for Bitcoin & Crypto Mining

- 1,600W – 3,200W CRPS
- With ASIC Miner Power Kit

Isolated Board Mount DC-DC

- 15W to 1,600W, DOSA bricks, PMBus
- Vin range covering 9 – 160Vdc “Universal Input”
- 3.3V to 54Vout

Power Products

Front-End AC-DC Power Titanium & Platinum Efficiency

click for Landing page → Front-End Power Supply Unit



Data Center & Open Compute

Power Shelf

click for Power Shelf → Power Shelf

Data Center & Open Compute

PSU

click for PSU → Power Supply Unit



1600Watt ASIC Miner Power Kit

2700Watt ASIC Miner Power Kit

click for Landing page → Titanium ASIC Miner Power Supply Kits



Power Products

Regulated DC-DC Power Converters

click for Landing page → DC-DC Power Converters



More Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Power Products in Blockchain & AI













1600Watt ASIC Miner Power Kit

2700Watt ASIC Miner Power Kit









More Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Power Products for AI…Powering 256 AI Chips

Sub System PSU
(3kW-5.5kW) N+1

Sub System Shelf
(15kW-33kW)

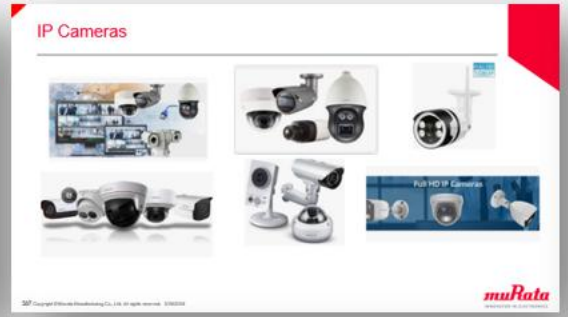
45 Shelves Per Rack
15 Shelves in Parallel
1MW

Rack
256 Accelerators



PoE Applications (Power Over Ethernet)

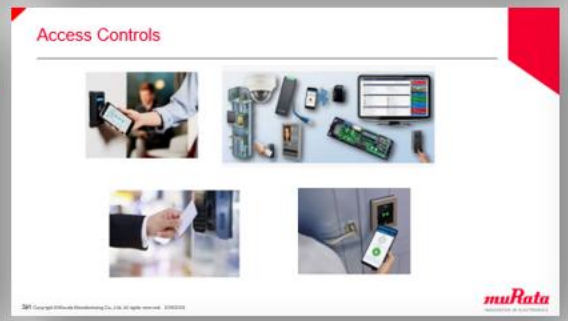






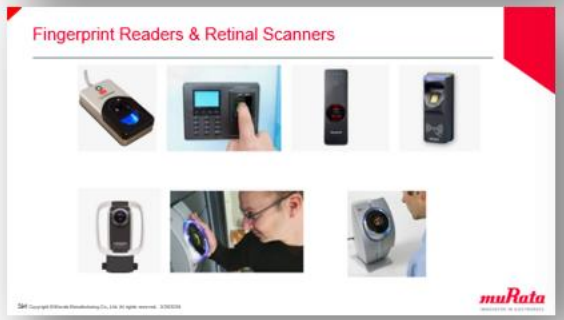


















Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

click for Landing page

Isolated DC-DC converters for PoE

List of PoE Modules

Standard	Type	Class	PSE's maximum suppling power	PD's maximum power	Appearance & Shape	Size	Output Voltage	Part Number	Features
PoE IEEE802.3af	Type1	0 (3)	15.4W	12W 10W		26 x 14.8 x 6.2 mm	12V 5V	MYBSP01201ABF MYBSP00502ABF	• Low profile SMD type • Operating Temperature : -40 to +85 °C • Low EMI : compliant with CISPR class B • 2250Vdc Input-Output Isolation • Suffix=B : Class2 with PFM control • Suffix=S/T/U : Class0/1/2 with PWM control
		2	7W	6.49W			12V 5V	MYBSP01201ABFB MYBSP00502ABFB	
		0 (3)	15.4W	12W 10W		26 x 14.8 x 6.0 mm	12V 5V	MYBSP01201ABFS MYBSP00502ABFS	
		1	4W	3.84W			12V 5V	MYBSP01201ABFT MYBSP00502ABFT	
		2	7W	6.49W			12V 5V	MYBSP01201ABFU MYBSP00502ABFU	
PoE+ IEEE802.3at	Type2	4	30W	25.5W		35.5 x 22.4 x 10.55 mm	12V 5V	MYBSP0122BABFT MYBSP0055AABFT	• Low profile SMD type • Available continuous 25.5W at +85℃ • Low EMI : compliant with CISPR class B • 2250Vdc Input-Output Isolation • No External capacitor operation
PoE++ IEEE802.3bt	Type3	5	45W	40W		22.2 x 56.4 x 8.52 mm	12V	MYBSP0124CAZFT	• Support IEEE802.3bt/ PoE++ class6 • 2250Vdc Input-Output Isolation • Available PSE Indicator, Adapter-Oring • Operating Temperature : -40 to +85 °C
		6	60W	51W					
	Type4	7	75W	62W			12V	MYBSP01206AZFT	• Output Voltage Adjustable :+/-10% • 2250Vdc Input-Output Isolation • Available PSE Indicator, Adapter-Oring • Operating Temperature : -40 to +85 °C
		8	90W	71.3W					
PSE Boost-up	Type1 Type2	0-4	30W	25.5W		35.5 x 22.4 x 8.9 mm	54V/0.6A	MYBSS054R6EBF	• Low profile SMD type • Operating Temperature :-40 to +85℃ • Operations input from 10.8V to 27V • 2250Vdc Input-Output Isolation

© Murata Manufacturing Co., Ltd. All rights reserved.





Digital Panel Meters Applications & Products









Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Digital Panel Meter Products – *(To Be Discontinued)*

Murata Power Solutions offers a full line of digital panel meters that can accurately measure…

- AC Volts: up 600V
- AC Amps: up to 2000A
- AC Watts: up to 26.4kW
- AC Frequency: 45 to 450Hz
- DC Volts: up to 430V
- DC Amps: up to 1200A
- Temperature: -40 to +100ºC (–40 to +212ºF)
- Process Control: 4 – 20mA Current Loop

A full line of accessories and tooling is available, including shunts and CTs



AC Ammeter Digital Meter



DC Ammeter Digital Meter



Multi Function Digital Meter



Process Monitor Digital Meter



Digital Thermometers



AC Line Frequency Monitor



AC Voltmeter Digital Meter



DC Voltmeter Digital Meter

To Be Discontinued / NRND

Last Time Order Due: 3/31/2027

Last Shipment Date: 3/31/2028

Click for brochure



© Murata Manufacturing Co., Ltd. All rights reserved.

ionissimo Installed Applications - *(To Be Discontinued)*

Room air conditioner



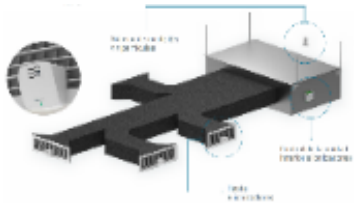
Ionizer

Central room air conditioner



Ionizer

Central industrial air conditioner



Ionizer

Circulator for clothes



Ozonizer

To Be Discontinued / NRND

Last Time Order Due: 3/31/2027

Last Shipment Date: 9/30/2027

Refrigerator



Ozonizer/Ionizer

Washer



Ozonizer

Dishwasher



Ionizer

Dental milling machine



Ionizer

Coffee mill



Ionizer

Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

ionissimo: Products Landscape 2025

	Items	Parts number	Picture	Status	Input voltage	Ion amount at 20cm	Ozone density	Applications
Datasheet	Ionizer	MHM305 series		MP	12Vdc	-5Mpcs/cc	0.04mg/h	Air conditioner, refrigerator, dishwasher, air cleaner, car accessary for air cleaner, humidifier, dehumidifier, e.g.
Datasheet		MHM306 series		MP	12Vdc	-5Mpcs/cc	0.6mg/h	
Datasheet		MHM314 series Safety approval : UL867		MP	12Vdc	-8Mpcs/cc	0.1mg/h	
Datasheet		MHM320 series **NEW**		MP	12Vdc	-8Mpcs/cc	0.8mg/h	
Datasheet		MHM400 series		MP	12Vdc	+5Mpcs/cc	0.1mg/h	
Datasheet		MHM402 series		MP	230Vac	-4Mpcs/cc	0.4mg/h	
Datasheet		MHM411 series (sample available in Apr, 22)		Under developing	100Vac-120Vac	-3Mpcs/cc	0.2mg/h	
Datasheet	Active Oxygen Module (Ozonizer)	MHM500-00A		MP	12Vdc	-	1.1mg/h (30% duty)	Dishwasher, e.g.
Datasheet		MHM501-00 (high reliability)		MP	12Vdc	-	1.0mg/h (30% duty)	Refrigerator, air purifier, humidifier, dehumidifier, e.g.
Datasheet		MHM502-01A (high density ozone)		MP	12Vdc	-	45mg/h	washing machine

© Murata Manufacturing Co., Ltd. All rights reserved.

Optical Transceivers - Power Tree



Form Factor: SFP (Small Form Factor Pluggable)



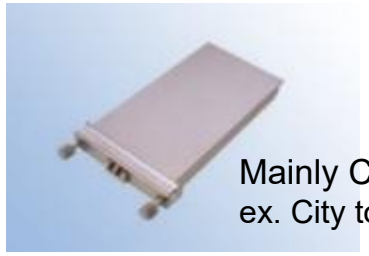
Mainly Access Network
ex. Server to Server

Form Factor: QSFP (Quad SFP)



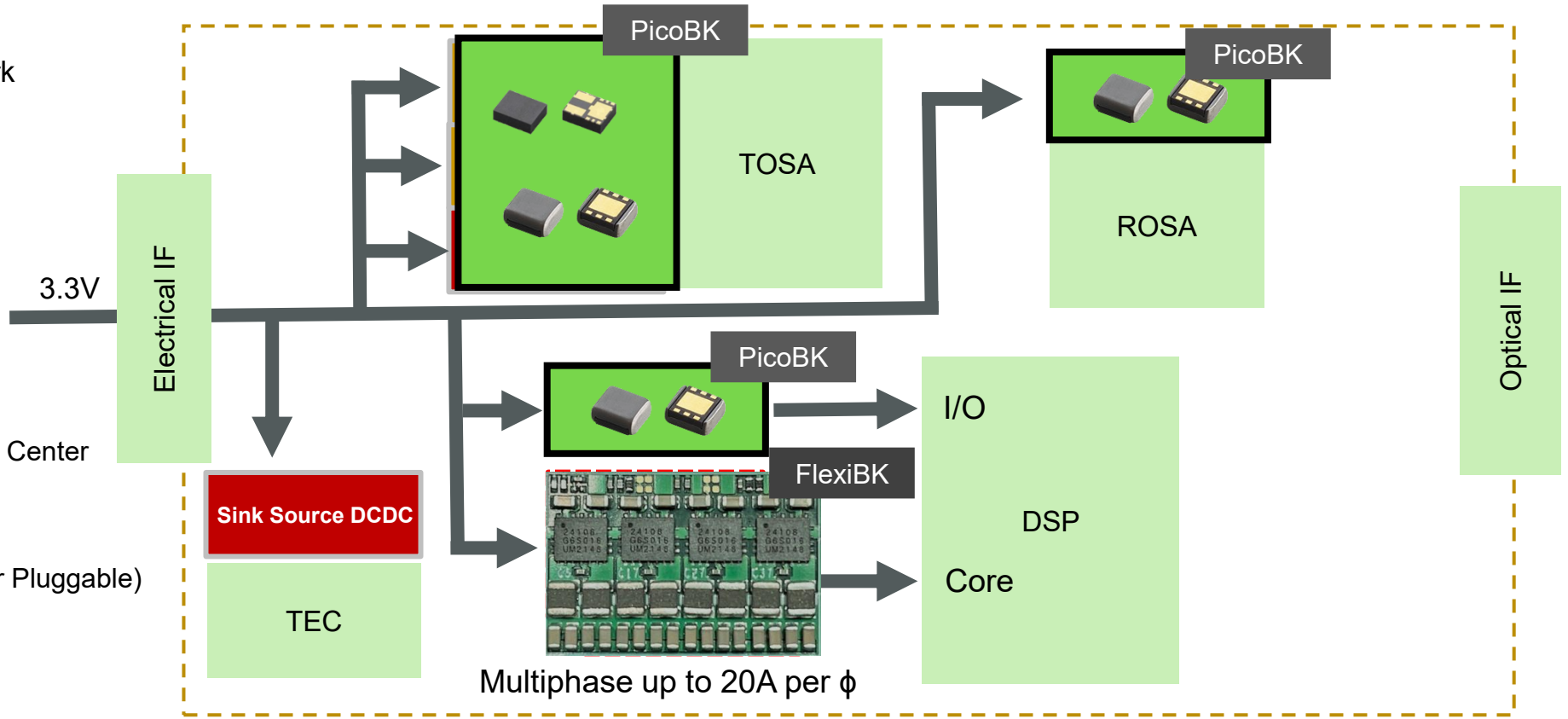
Mainly Metro Network
ex. Data Center to Data Center

Form Factor: CFP (C Form Factor Pluggable)



Mainly Core Network
ex. City to City

Function Block of Optical Transceiver (QSFP-DD)



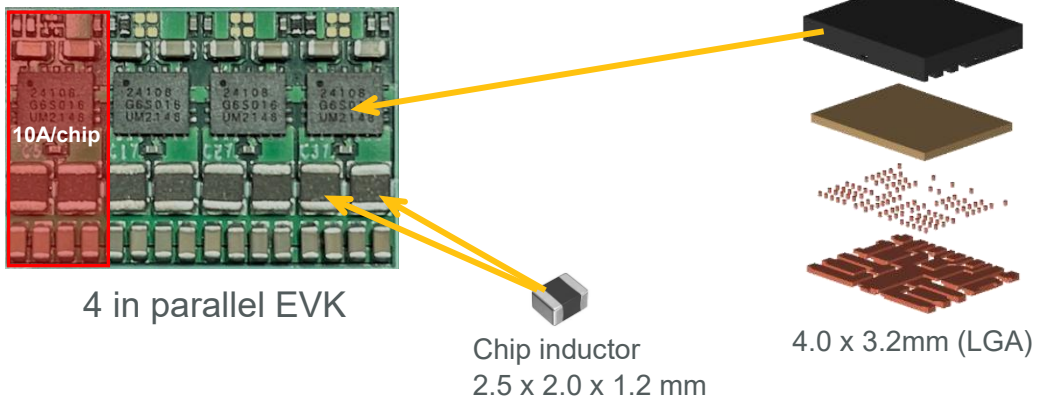
Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

FlexiBK™ PE24110

3.3Vin, low Vo, 12A, 2-stage buck regulator IC



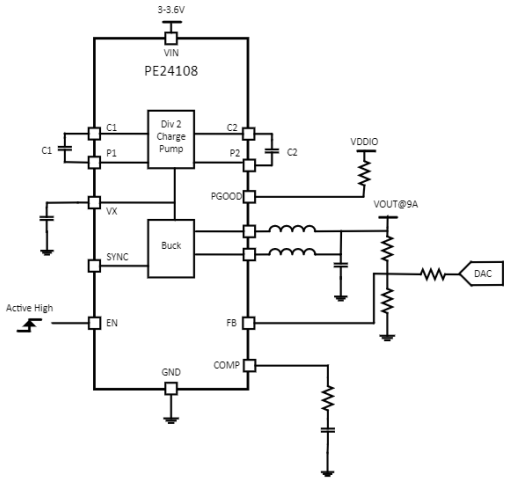
4 in parallel EVK

Chip inductor
2.5 x 2.0 x 1.2 mm

4.0 x 3.2mm (LGA)

Key Features

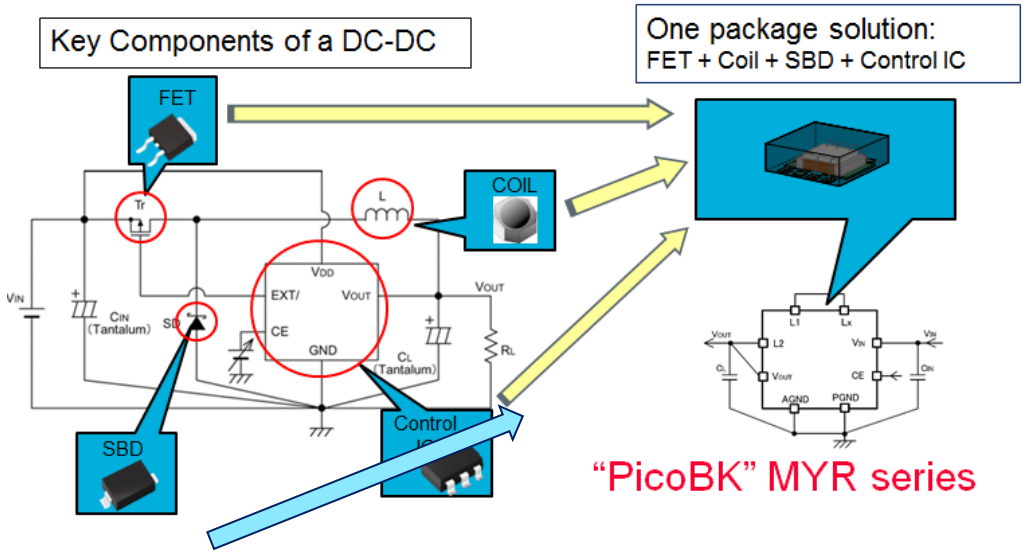
- 2-Stage architecture:
  charge pump + buck regulator
  (div.2) (dual phase)
- VIN: 3.0 – 3.6 VDC
- VOUT: 0.35 – 0.7 VDC
- IOUT: 12A - paralleled up to 4 phase
- Ultra low profile
  (< 1.2mm) for back side of PCB
- Low input ripple



PE24110, click for product → **FlexiBK**

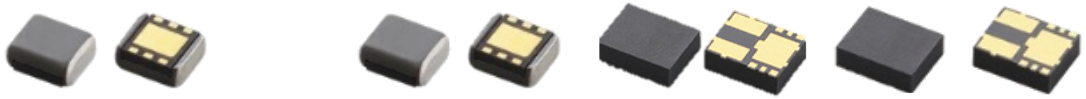
PicoBK™ 150mA – 2A

Thin and small size DC-DC converter with integrated inductor and control IC



"PicoBK" MYR series

Input voltage range :0.65V – 6.0V
Fixed output voltage :0.5V – 6.0V



150mA, 600mA, 1A | **800mA boost** | **1.5A** | **2A**

MYR Series, click for products → **PicoBK**

© Murata Manufacturing Co., Ltd. All rights reserved.

Automatic Test Equipment (ATE)

Devices tested by ATE include:

- integrated circuits (ICs)
- printed circuit boards (PCBs)
- hard disk drives (HDDs)
- systems and modules in automobiles
- line-replaceable units (LRUs) that support aircraft, spacecraft, and satellites

- **Hardware**, including standard 19-inch rack mount servers and workstations, **power supplies**, PCIe backplanes and related PXI modules, interface modules, embedded controllers, analog inputs and outputs, digital input/output, and AC-DC outlets



Products on Next Page

© Murata Manufacturing Co., Ltd. All rights reserved.

BACK

Click each image for product offering

Power Solutions from AC to the System Loads

AC Input

AC-DC Power

AC ➡ 12-54V

Front-end, Bulk Power, Rack Mount Power



Rack Power up to 21.6kW
output voltages: 12V – 54V



Open-frame & Enclosed
250W to 1,000W



Intermediate Bus Converter

48V ➡ 12V

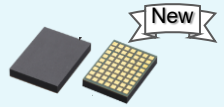
Isolated



100W to 1,500W

Non-Isolated

UltraCP™ New



72W to 200W

48V ➡ 5V or 3.3V

Isolated

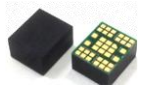


15W to 200W

Point-of-Load

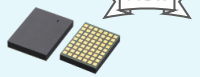
12V ➡ 0.5 to 5V

MonoBK™



2.5A to 50A

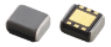
UltraBK™ New



4A to 10A

5V or 3.3V ➡ 0.8 to 6V

PicoBK™



150mA to 2A

3.3V to 24V ➡ ± 3.3 to 12V

Isolated



1W to 6W

SYSTEM LOADS:

- Processors
- FPGAs
- ASICs
- Logic
- Memory
- Fans
- Disks
- Sensors
- Comms.
- Actuators
- LED
- etc.

Click for brochure

High-Power & Isolated DC-DC Power Solutions



© Murata Manufacturing Co., Ltd. All rights reserved.

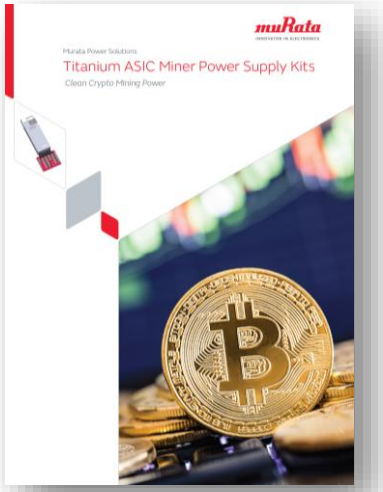
HOME

Murata Power Solutions - Brochures



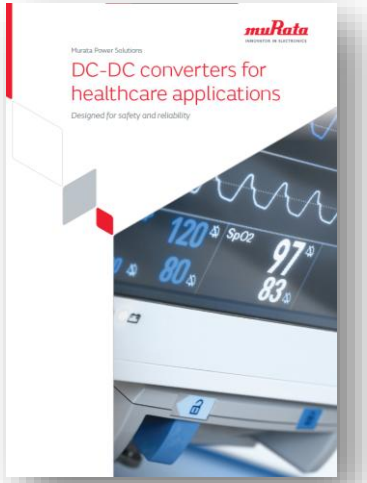


















© Murata Manufacturing Co., Ltd. All rights reserved.

HOME

Document Control

Version #	Purpose/Change	Date	Author
0.1	Initial Draft	August 9, 2021	Christopher Daily
1.0	Released	September 13, 2021	Christopher Daily
1.1	Updated datasheet links, added NPI products	November 1, 2021	Christopher Daily
2.0	Added CRPS 1,600W, PQU1000, MYC0409 charge pump	February 14, 2022	Christopher Daily
2.1	Updated PoL DC-DC selector guide	April 8, 2022	Christopher Daily
2.2	Updated URL to Front-End PSU image, added new 4-page MPS brochure, updated datasheet links, datasheet for 600mA Buck	May 20, 2022	Christopher Daily
2.3	Fixed PN typos, added 150mA PicoBK ds	June 28, 2022	Christopher Daily
2.4	Added D1U54-D-2500 ds, added MHM411 ds, added D1U54T 2,500W ds	October 3, 2022	Christopher Daily
2.5	Updated L/T on POL lineup, added ATE application, updated brochure links, added MGN1 GaN gate drive datasheet link, added separate links to images for Charge Pump | 2-stage Buck; MonoBK | PicoBK	February 24, 2023	Christopher Daily
2.6	Added technical article links to PMBus and Choosing a medical PSU, and PoE landing page, added new DC-DC for Healthcare brochure, removed 10A MYC0300 & 4Ax4 pSemi device – no longer under development. PE24108 can now provide 10A per phase. Added new 51W low-cost version POE device	June 26, 2023	Christopher Daily
2.7	Updated Rail IRH 150W solution on applications. 4-channel MonoBK for FPGA, & new 4A released. MGJ1/2B gate drive released. Updated OCP selector guide, updated all NCL products & images. New OCP shelf and PSU. Added NME1, NMR1, NMV1 iso. Dc-dc. Updated POL L/T	August 25, 2023	Christopher Daily
2.8	Updated MonoBK lead times, added link to new 4-ch output & 3.5A MonoBK, added PQU1000-COVER Link, added new FlexiCP 4A device. D1U54P 2,000W To be Discontinued.	December 13, 2023	Christopher Daily
3.0	New MPS PPTX layout, New 20A MonoBK, removed MVAC400, added Blockchain & AI application	March 1, 2024	Christopher Daily
3.1/2	Update BMP selector guide, new 10A MonoBK, new pSemi non-isolated solutions, updated PoE links	April 8, 2024	Christopher Daily
4.0	Updated the layout and color scheme to represent MMC guidelines	June 6, 2024	Christine Tarantino
4.1	6A MonoBK 9.6Vin min, updated FlexiBK, added MPQ860 non-isolated DC-DC & MPQ700 isolated, updated BMP products,	August 15, 2024	Christopher Daily
4.2	NCL Group no longer supporting High-Frequency, High-Power transformer, New MPQ700, 1300, 860, & 1500. updated FEP selector guide	September 12, 2024	Christopher Daily
4.3	Fixed link on MPS0117 1/16th brick, added UEE Series isolated DC-DC brick, updated many BMP solutions from EOLs. Added RFPA application.	October 18, 2024	Christopher Daily
4.4	New PPT layout template, New PicoBK added to Selector Guide, Added new PQC600 open-frame, Updated application sections hyperlinks, new OCP 5.5kW PSU, added more slides to SSN applications, added OK Series selector guide, added new 6.5W PoE PD device	March 2025	Christopher Daily
4.5	Added App Note links to: Front-end PSU, Open-Frame, Gate Drive, 4-ch MonoBK, Charge Pump, 40A MonoBK updated to 50A, 3.2kW CRPS datasheet updated, Updated Gate Drive selector guide,	April 2025	Christopher Daily
5.0	MPQ800 ds now available, MPQ1600 ds now available, 10W BAC AC-DC PCB mount NRND, New MPE 165W, removed MPQ1600	June 2025	Christopher Daily
5.1	NCM3 & NXJ1T (block coil) new, added High Voltage Resistors & Power Magnetics to applications, added Solar & Energy applications, updated NCL isolated DC-DC and gate drive selector guides, updated PoE selector guides with new 450kHz	September 2025	Christopher Daily
5.2	Updated hyperlinks to the entire PDF Tool	January 2026	Christopher Daily,