HALO ELECTRONICS, INC.
2933 Bunker Hill Lane, Ste 200
Santa Clara, CA 95054
Phone: (650) 903-3800
Fax: (650) 903-9300
www.haloelectronics.com

HALO P/N: For all HALO parts

Certificate of Compliance

This is to certify the **HALO** products as described above is manufactured in accordance with applicable specifications and legislation requirements. For RoHS-compliant products with suffix 'RL' and 'LF', compliant to the hazardous substance content level is below the threshold limits specified in legislation requirements (see below table and remark section).

Test reports, when applicable or evidence that the material was previously inspected are on the file subject to examination and indicate conformance with applicable specification requirements.

EC / EU / USA Directives	Compliance
Directive 2011/65/EU (Updated: 8 June 2011) Directive (EU) 2015/863 (Updated: 31 March 2015)	RoHS 2.0 (Pb, Cd, Hg, Cr^{6+}, PBB, PBDE, DEHP, BBP, DBP, DIBP)
Directive SJ/T 11364-2014 (Updated: 1 July 2016)	China RoHS II (Pb, Cd, Hg, Cr^{6+}, PBB, PBDE)
Directive 2006/122/EC (Updated: 12 December 2006)	PFOS (Perfluorooctanesulfonic acid)
Directive (EU) 2020/784 (Updated: 8 April 2020)	PFOA (Perfluorooctanoic acid)
ECHA publishes PFAS restriction (Updated: 7 February 2023)	PFAS (per- and polyfluoroalkyl substances)
Directive 2009/251/EC (Updated: 17 March 2009)	DMF (Dimethyl fumarate)
Directive (EU) 2019/1021 (Updated: 25 September 2025)	POPs (Persistent Organic Pollutants)
EC No.1907/2006 (Updated: 4 February 2026)	REACH – SVHC 253 (Reference to Annex XIV (SVHC 253 list) & Annex XVII)
TSCA (Toxic Substances Control Act) By United States Environmental Protection Agency (Updated: March 2021)	TSCA PBT (Deca-BDE, PIP 3:1, 2,4,6-TTBP, HCBD, PCTP)

Remarks:

(i) SMT products with suffix "RL":
- (a) RoHS Compliant Products generally. Some parts with RL suffix are even lead free such as NS series, NYN series and some specific parts.
- (b) RoHS: exemption applied, (#7a) - Lead in high melting temperature type solders in solder joints.
- (c) REACH: Lead concentration in solder joint of SMT RL products is over 1000ppm but the shipped out weight quantity of lead is far below 1 ton / year.

(ii) SMT products with suffix "LF" or "NL": Lead Free Products.

(iii) DC/DC converters with suffix "LF": RoHS exemption applied, #7(c)-I, for internal chip resistors.

(iv) All of HALO products comply with the REACH 0.1% limit weight by weight for any of the current all REACH SVHCs except for Lead, as mentioned in (i c) and (iii).

(v) HFJ series are lead-free and do not require RoHS exemption, exception being Pin & Paste / Low Profile / Customer Parts.

SIGNATURE : 
NAME (printed) : ERIC CHEW
TITLE : QUALITY MANAGER

SOLUTIONS THAT KEEP YOU CONNECTED