



Certificate of Compliance

Certificate: 80226726

Master Contract: 152167

Project: 80226726

Date Issued: 2024-11-13

Issued to: Littelfuse, Inc.
8755 W. Higgins Rd Suite 500
Chicago, Illinois 60631
United States

Attention: Yvonne Wang

The products listed below are eligible to bear the CSA Mark shown with adjacent indicator "Triangle symbol"



Issued by: Vasyl Dykhman
Vasyl Dykhman

PRODUCTS

Class 4824 31 SENSORS FOR MONITORING, PROTECTION AND LIMITING - Thermistor-type components

PTC surface mount type thermistors for overcurrent protection.

Model(s)	Vmax (V)	I _{max} (A)	I _t (A)	I _h (A)	I _{ss} (A)	T _s (C)	R _{min} (Ohm)	T _T (sec)
SMD030F	60	10	0.60	0.30	0.028	125	1.20	3.0 @ 1.5A
SMD030F-2018	60	20	0.80	0.30	0.025	125	0.50	1.5 @ 1.5A
SMD050F	60	10	1.00	0.50	0.028	125	0.35	4.0 @ 2.5A
SMD075F, SMD075F/60	30/60	40/10	1.50	0.75	0.057/0.028	125	0.35	0.30 @ 8.0A
SMD100F, SMD100F/33	30/33	40	2.20	1.10	0.057/0.051	125	0.12	0.50 @ 8.0A
SMD100F-2018	15	40	2.20	1.10	0.093	125	0.10	0.50 @ 8.0A
SMD125F	15	40	2.50	1.25	0.113	125	0.07	2.0 @ 8.0A
SMD150F	15	40	3.00	1.50	0.127	125	0.06	5.0 @ 8.0A
SMD150F-2018	15	40	3.00	1.50	0.120	125	0.07	1.0 @ 8.0A
SMD185F	33	40	3.60	1.85	0.045	125	0.065	5.0 @ 8.0A
SMD200F	15	40	4.00	2.00	0.127	125	0.05	12.0 @ 8.0A



Certificate: 80226726

Master Contract: 152167

Project: 80226726

Date Issued: 2024-11-13

SMD200F-2018	6	40	4.20	2.00	0.250	125	0.048	3.0 @ 8.0A
SMD200F/24-2920	24	40	4.00	2.00	0.062	125	0.05	5.0 @ 8.0A
SMD250F	15	40	5.00	2.50	0.127	125	0.035	25.0 @ 8.0A
SMD250F/15-2920	15	40	5.00	2.50	0.100	125	0.035	10.0 @ 8.0A
SMD260F	6	40	5.20	2.60	0.283	125	0.025	20.0 @ 8.0A
SMD300F, SMD300F/15	6/15	40	6.00	3.00	0.250/0.100	125	0.015	35.0 @ 8.0A
SMDH120	16	50	2.30	1.20	0.125	165	0.15	2.0 @ 8.0A
SMDH160	16	70	3.20	1.60	0.137	165	0.05	15.0 @ 8.0A
decaSMDC050F/60	60	10	1.10	0.55	0.017	125	0.20	0.10 @ 8.0A
SMDC185F/33	33	40	3.70	1.85	0.051	125	0.05	2.5 @ 8.0A
SMDC300F/24, ASMDC300F/24	24	40	6.00	3.00	0.071	125	0.015	5.0 @ 8.0A
SMDC310F/18	18	50	6.00	3.10	0.083	125	0.013	25.0 @ 8.0A
miniSMDC010F	60	40	0.30	0.10	0.012	125	0.70	5.0 @ 0.5A
miniSMDC014F	60	10	0.28	0.14	0.012	125	1.6	0.008 @ 8.0A
miniSMDC020F	30	10	0.40	0.20	0.027	125	0.60	0.02 @ 8.0A
miniSMDC030F	30	40	0.60	0.30	0.027	125	0.20	0.10 @ 8.0A
miniSMDC050F	24	100	1.00	0.50	0.033	125	0.15	0.15 @ 8.0A
miniSMDC075F	13.2	100	1.50	0.75	0.075	125	0.11	0.20 @ 8.0A
miniSMDC075F/24	24	40	1.50	0.75	0.033	125	0.09	0.30 @ 8.0A
miniSMDC075F/33	33	100	1.60	0.75	0.030	125	0.11	1.0 @ 8.0A
miniSMDC100F, miniSMDC110F	8	100	2.20	1.10	0.150	125	0.04	0.30 @ 8.0A
miniSMDC110F/16	16	100	2.20	1.10	0.050	125	0.06	0.30 @ 8.0A
miniSMDC110F/24	24	20	2.20	1.10	0.033	125	0.06	0.50 @ 8.0A
miniSMDC125F, miniSMDC125F/16	6/16	100	2.50	1.25	0.133/0.050	125	0.05	0.40 @ 8.0A
miniSMDC150F	6	100	3.00	1.50	0.133	125	0.04	0.50 @ 8.0A
minSMDC150F/12, miniSMDC150F/16	12/16	100	2.80	1.50	0.066/0.050	125	0.04	0.50 @ 8.0A
miniSMDC150F/24	24	20	3.00	1.50	0.042	125	0.04	1.5 @ 8.0A
miniSMDC160F	9	100	3.20	1.60	0.089	125	0.03	1.0 @ 8.0A
miniSMDC200F	8	100	4.00	2.00	0.125	125	0.02	5.0 @ 8.0A
miniSMDC200F/16	16	40	4.00	2.00	0.075	125	0.02	5.0 @ 8.0A
miniSMDC260F, miniSMDC260F/12, miniSMDC260F/13.2, miniSMDC260F/16	6/12/13.2/16	100	5.00	2.60	0.167/0.083/0.091/0.075	125	0.015	5.0 @ 8.0A



Certificate: 80226726

Master Contract: 152167

Project: 80226726

Date Issued: 2024-11-13

miniSMDC300F	6	100	6.00	3.00	0.167	125	0.011	5.0 @ 8.0A
microSMD005F	30	10	0.15	0.05	0.033	125	3.60	1.5 @ 0.25A
microSMD010F	30	10	0.25	0.10	0.026	125	2.10	1.0 @ 0.5A
microSMD035F	6	40	0.75	0.35	0.133	125	0.32	0.20 @ 8.0A
microSMD050F	13.2	40	1.00	0.50	0.060	125	0.25	0.05 @ 8.0A
microSMD075F	6	40	1.50	0.75	0.133	125	0.11	0.10 @ 8.0A
microSMD110F	6	40	2.20	1.10	0.133	125	0.07	0.20 @ 8.0A
microSMD150F	6	40	3.00	1.50	0.133	125	0.04	1.0 @ 8.0A
microSMD175F	6	40	3.50	1.75	0.133	125	0.025	0.80 @ 8.0A
microSMD200F	6	100	4.00	2.00	0.133	125	0.02	2.5 @ 8.0A
nanoSMDC012F	48	10	0.39	0.12	0.010	125	1.40	0.20 @ 1.0A
nanoSMDC016F	48	10	0.45	0.16	0.010	125	1.10	0.30 @ 1.0A
nanoSMDC020F	24	100	0.42	0.20	0.025	125	0.65	0.10 @ 8.0A
nanoSMDC025F	16	100	0.58	0.25	0.037	125	0.40	0.10 @ 8.0A
nanoSMDC035F	16	20	0.75	0.35	0.037	125	0.45	0.10 @ 3.5A
nanosSMDC050F/13.2	13.2	100	1.10	0.50	0.060	125	0.20	0.10 @ 8.0A
nanoSMDC075F	6	100	1.50	0.75	0.133	125	0.09	0.10 @ 8.0A
nanoSMDC110F	6	100	2.20	1.10	0.133	125	0.07	0.10 @ 8.0A
nanoSMDC150F	6	100	3.00	1.50	0.133	125	0.04	0.30 @ 8.0A
nanoSMDC200F	6	100	4.00	2.00	0.167	125	0.02	1.5 @ 8.0A
picoSMDC010S	15	100	0.30	0.10	0.033	125	1.50	0.60 @ 0.5A
picoSMDC012S	15	100	0.30	0.12	0.033	125	1.50	0.10 @ 1.0A
picoSMDC020S	9	100	0.47	0.20	0.055	125	0.75	0.10 @ 2.0A
picoSMDC035S	6	100	0.75	0.35	0.083	125	0.35	0.20 @ 1.75A
picoSMDC050S	6	100	1.00	0.50	0.083	125	0.15	0.10 @ 8.0A
picoSMDC075S	6	40	1.50	0.75	0.117	125	0.10	0.20 @ 8.0A
femtoSMDC005F	15	40	0.15	0.05	0.033	125	3.80	0.10 @ 0.5A
femtoSMDC008F	12	40	0.20	0.08	0.042	125	2.80	0.10 @ 0.6A
femtoSMDC010F	12	40	0.25	0.10	0.042	125	1.70	0.10 @ 0.7A
femtoSMDC012F	9	40	0.30	0.12	0.055	125	1.10	0.10 @ 0.8A
femtoSMDC016F	9	40	0.40	0.16	0.055	125	1.0	0.10 @ 1.0A
femtoSMDC020F	9	40	0.45	0.20	0.055	125	0.70	0.10 @ 2.0A
femtoSMDC035F	6	40	0.70	0.35	0.083	125	0.28	0.10 @ 3.5A
PSR-27313-010	15	100	0.30	0.10	0.033	125	2.5	1.0 @ 0.5A
PSR-27313-012	15	100	0.30	0.12	0.033	125	2.0	0.20 @ 1.0A
PSR-27313-020	9	100	0.45	0.20	0.055	125	0.65	0.10 @ 2.0A
PSR-27313-035	6	100	0.75	0.35	0.100	125	0.42	0.10 @ 3.5A



Certificate: 80226726

Master Contract: 152167

Project: 80226726

Date Issued: 2024-11-13

PSR-27313-050	6	40	1.0	0.50	0.100	125	0.15	0.10 @ 8.0A
PSR-27313-110	6	40	2.0	1.10	0.133	125	0.05	0.10 @ 8.0A

Model(s)	Vmax (V)	Imax (A)	It (A)	Ih (A)	Iss (A)	Ts (C)	Rmin (Ohm)	TT (sec)
PSR-28498	6	100	1.50	0.75	0.133	125	0.09	0.10 @ 8.0A

Notes:

1. The devices are certified as components only for use in equipment where the suitability of the combination is to be determined by the Authority that certifies the end product.
2. These devices have not been investigated for use in a functional safety circuit.
3. Suffixes denoting different lead plating, different shipping packaging methods, or resistance matching may be added.
4. Rating:

Maximum rated ambient temperature is 85°C for all models except for model SMDH is 125°C

Vmax - maximum voltage of a thermistor as declared by the manufacturer.

Imax - current value assigned by the manufacturer that complies with all the requirements of the standard.

It - for a current-limiting PTC thermistor, minimum current value declared by the manufacturer at which a PTC thermistor switches from low to high resistance at a specified temperature or temperature range.

Ih - maximum current a current limiting PTC thermistor is able to maintain in a low resistance "on" state at rated ambient for a period of time specified by the manufacturer.

Iss – steady state current measured after a thermistor's temperature stabilizes in air at an ambient temperature specified by the manufacturer while connected to rated voltage and while operating in its high-resistance state for PTC thermistors

Ts - temperature of the surface of a thermistor while the thermistor is energized under normal operating conditions.

Rmin - rated resistance at 20 degrees C ambient temperature unless specified by the manufacturer.

TT - time-to-trip time required for a PTC thermistor to limit the manufacturer's declared trip current (It) to 50 % of its value when energized at the rated voltage and ambient temperature.

APPLICABLE REQUIREMENTS

CSA E60730-1:15, AMD1:2017, AMD2:2021 - Automatic electrical controls — Part 1: General requirements

CAN/CSA-E60730-2-9:18, AMD2:2024 - Automatic electrical controls — Part 2-9: Particular requirements for temperature sensing controls