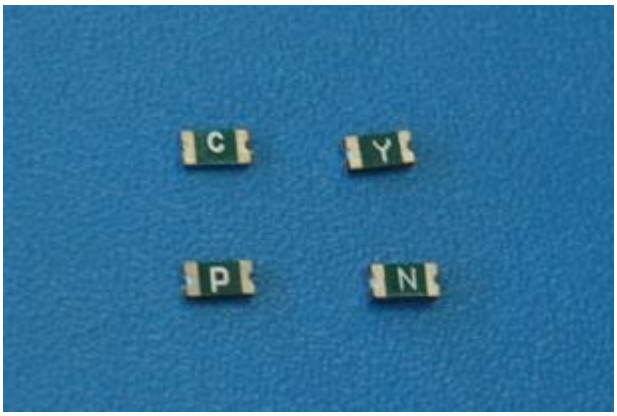
Polymer PTC Devices

东沃电子 DOWOSEMI



Features

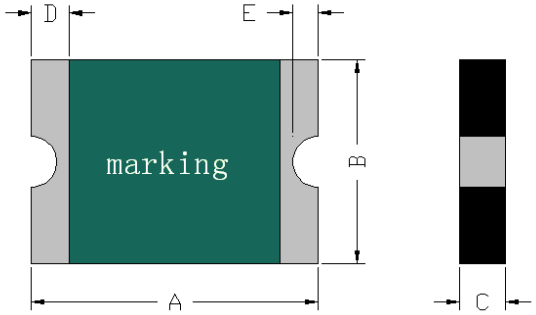
- Small size of 3216mm/1206mils
- Fast tripping resettable circuit protection
- Surface mount packaging for automated assembly
- Agency recognition: UL、TUV

DW-NSM(L) Series *Surface-mount devices*

Product Dimensions

Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-NSM005	3.50	1.80	0.85	0.25	0.10
DW-NSM010	3.50	1.80	1.00	0.25	0.10
DW-NSM012	3.50	1.80	0.85	0.25	0.10
DW-NSM016	3.50	1.80	0.85	0.25	0.10
DW-NSM020	3.50	1.80	0.85	0.25	0.10
DW-NSM020/24	3.50	1.80	0.85	0.25	0.10
DW-NSM025/16	3.50	1.80	0.85	0.25	0.10
DW-NSM025/24	3.50	1.80	0.85	0.25	0.10
DW-NSM035	3.50	1.80	0.85	0.25	0.10
DW-NSM035/16	3.50	1.80	0.85	0.25	0.10
DW-NSM035/24	3.50	1.80	0.85	0.25	0.10
DW-NSM050	3.50	1.80	0.85	0.25	0.10
DW-NSM050/16	3.50	1.80	0.85	0.25	0.10
DW-NSM050/24	3.50	1.80	1.30	0.25	0.10
DW-NSM075	3.50	1.80	1.00	0.25	0.10
DW-NSM075/8	3.50	1.80	1.00	0.25	0.10
DW-NSM075/16	3.50	1.80	1.30	0.25	0.10
DW-NSM090/8	3.50	1.80	1.00	0.25	0.10
DW-NSM100/8	3.50	1.80	1.30	0.25	0.10
DW-NSM110	3.50	1.80	1.30	0.25	0.10
DW-NSM110/8	3.50	1.80	1.30	0.25	0.10
DW-NSML110/8	3.50	1.80	0.70	0.25	0.10
DW-NSM125/8	3.50	1.80	1.30	0.25	0.10
DW-NSM150	3.50	1.80	1.30	0.25	0.10
DW-NSM150/8	3.50	1.80	1.30	0.25	0.10

Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-NSML150	3.50	1.80	0.70	0.25	0.10
DW-NSML150/8	3.50	1.80	0.70	0.25	0.10
DW-NSML150/12	3.50	1.80	0.70	0.25	0.10
DW-NSML150/16	3.50	1.80	0.90	0.25	0.05
DW-NSML175	3.50	1.80	0.70	0.25	0.10
DW-NSM175/8	3.50	1.80	0.70	0.25	0.10
DW-NSML175/12	3.50	1.80	0.70	0.25	0.10
DW-NSML175/16	3.50	1.80	0.90	0.25	0.05
DW-NSM200/8	3.50	1.80	1.70	0.25	0.10
DW-NSML200	3.50	1.80	0.70	0.25	0.10
DW-NSML200/8	3.50	1.80	1.70	0.25	0.10
DW-NSML200/12	3.50	1.80	0.70	0.25	0.10
DW-NSML200/16	3.43	1.80	1.40	0.25	0.10
DW-NSML260	3.50	1.80	0.70	0.25	0.10
DW-NSML260/12	3.50	1.80	0.70	0.25	0.10
DW-NSML260/16	3.40	1.80	1.20	0.15	0.05
DW-NSML300	3.50	1.80	0.70	0.25	0.10
DW-NSML300/12	3.50	1.80	0.70	0.25	0.10
DW-NSML300/16	3.40	1.80	1.20	0.25	0.10
DW-NSML350	3.50	1.80	0.70	0.25	0.10
DW-NSML350/12	3.50	1.80	0.70	0.25	0.10
DW-NSML350/16	3.50	1.80	1.40	0.25	0.10
DW-NSML380	3.50	1.80	0.70	0.25	0.10
DW-NSML380/12	3.50	1.80	0.70	0.25	0.10
DW-NSML400	3.50	1.80	1.00	0.25	0.10
DW-NSML400/12	3.50	1.80	1.00	0.25	0.10
DW-NSML450	3.50	1.80	1.00	0.25	0.10
DW-NSML450/12	3.50	1.80	1.00	0.25	0.10
DW-NSML500	3.50	1.80	1.00	0.25	0.10
DW-NSML550	3.50	1.80	1.00	0.25	0.10
DW-NSML600	3.50	1.80	1.00	0.25	0.10
DW-NSML650	3.50	1.80	1.40	0.25	0.10
DW-NSML700	3.50	1.80	1.40	0.25	0.10



Electrical Characteristics at 25℃

Part number	I_H	I_T	V_{max}	I_{max}	Max.Time-to-trip		Pd_{max}	R_{min}	R_{1max}
	(A)	(A)	(V)	(A)	(A)	(S)	(W)	(Ω)	(Ω)
DW-NSM005	0.05	0.15	60	10	1.00	1.20	0.6	2.000	50.000
DW-NSM010	0.10	0.25	60	10	1.00	0.20	0.6	1.600	15.000
DW-NSM012	0.125	0.29	30	20	1.00	0.20	0.6	1.500	6.000
DW-NSM016	0.16	0.37	30	20	1.00	0.30	0.6	1.200	4.500
DW-NSM020	0.20	0.40	16	40	8.00	0.05	0.6	0.600	2.500
DW-NSM020/24	0.20	0.40	24	40	8.00	0.05	0.6	0.600	2.500
DW-NSM025/16	0.25	0.50	16	40	8.00	0.08	0.6	0.550	2.300
DW-NSM025/24	0.25	0.50	24	40	8.00	0.08	0.6	0.550	2.300
DW-NSM035	0.35	0.75	6	40	8.00	0.10	0.6	0.300	1.200
DW-NSM035/16	0.35	0.75	16	40	8.00	0.10	0.6	0.300	1.200
DW-NSM035/24	0.35	0.75	24	40	8.00	0.10	0.6	0.300	1.200
DW-NSM050	0.50	1.00	6	40	8.00	0.10	0.6	0.150	0.700
DW-NSM050/16	0.50	1.00	16	40	8.00	0.10	0.6	0.150	0.700
DW-NSM050/24	0.50	1.00	24	40	8.00	0.10	0.6	0.150	0.700
DW-NSM075	0.75	1.50	6	40	8.00	0.20	0.6	0.100	0.290
DW-NSM075/8	0.75	1.50	8	40	8.00	0.20	1.2	0.100	0.290
DW-NSM075/16	0.75	1.50	16	40	8.00	0.20	1.2	0.100	0.290
DW-NSM090/8	0.90	1.80	8	40	8.00	0.20	1.2	0.080	0.260
DW-NSM100/8	1.00	2.00	8	40	8.00	0.30	1.2	0.060	0.230
DW-NSM110	1.10	2.20	6	40	8.00	0.30	0.6	0.050	0.210
DW-NSM110/8	1.10	2.20	8	40	8.00	0.30	1.2	0.050	0.210
DW-NSML110/8	1.10	2.20	8	50	8.00	0.30	1.2	0.015	0.100
DW-NSM125/8	1.25	2.50	8	40	8.00	0.40	1.2	0.050	0.180
DW-NSM150	1.50	3.00	6	40	8.00	1.00	0.6	0.040	0.120
DW-NSM150/8	1.50	3.00	8	40	8.00	1.00	1.2	0.040	0.120
DW-NSML150	1.50	3.00	6	50	8.00	5.00	1.2	0.005	0.065
DW-NSML150/8	1.50	3.00	8	50	8.00	5.00	1.2	0.005	0.065
DW-NSML150/12	1.50	3.00	12	50	8.00	5.00	1.2	0.005	0.065
DW-NSML150/16	1.50	3.00	16	50	8.00	5.00	1.2	0.005	0.065
DW-NSML175	1.75	3.50	6	50	8.00	5.00	1.2	0.005	0.060
DW-NSM175/8	1.75	3.50	8	40	8.00	5.00	1.2	0.005	0.060
DW-NSML175/12	1.75	3.50	12	50	8.00	5.00	1.2	0.005	0.060
DW-NSML175/16	1.75	3.50	16	50	8.00	5.00	1.2	0.005	0.060
DW-NSM200/8	2.00	4.00	8	40	8.00	5.00	1.2	0.005	0.040
DW-NSML200	2.00	4.00	6	50	8.00	5.00	1.2	0.005	0.040
DW-NSML200/8	2.00	4.00	8	50	8.00	5.00	1.2	0.005	0.040
DW-NSML200/12	2.00	4.00	12	50	8.00	5.00	1.2	0.005	0.040
DW-NSML200/16	2.00	4.00	16	50	8.00	5.00	1.2	0.005	0.040
DW-NSML260	2.60	5.20	6	50	8.00	5.00	1.2	0.003	0.025

Part number	I_H	I_T	V_{max}	I_{max}	Max.Time-to-trip		Pd_{max}	R_{min}	R_{1max}
	(A)	(A)	(V)	(A)	(A)	(S)	(W)	(Ω)	(Ω)
DW-NSML260/12	2.60	5.20	12	50	8.00	5.00	1.2	0.003	0.025
DW-NSML260/16	2.60	5.20	16	50	8.00	5.00	1.2	0.003	0.025
DW-NSML300	3.00	6.00	6	50	8.00	5.00	1.5	0.003	0.020
DW-NSML300/12	3.00	6.00	12	50	8.00	5.00	1.5	0.003	0.020
DW-NSML300/16	3.00	6.00	16	50	8.00	5.00	1.5	0.003	0.020
DW-NSML350	3.50	7.00	6	50	8.00	5.00	1.5	0.002	0.018
DW-NSML350/12	3.50	7.00	12	50	8.00	5.00	1.5	0.002	0.018
DW-NSML350/16	3.50	7.00	16	50	8.00	5.00	1.5	0.002	0.018
DW-NSML380	3.80	7.60	6	50	8.00	5.00	1.5	0.002	0.016
DW-NSML380/12	3.80	7.60	12	50	8.00	5.00	1.5	0.002	0.016
DW-NSML400	4.00	8.00	6	50	8.00	5.00	1.5	0.002	0.014
DW-NSML400/12	4.00	8.00	12	50	8.00	5.00	1.5	0.002	0.014
DW-NSML450	4.50	9.00	6	50	22.50	5.00	1.5	0.001	0.013
DW-NSML450/12	4.50	9.00	12	50	22.50	5.00	1.5	0.001	0.013
DW-NSML500	5.00	10.00	6	50	25.00	5.00	1.5	0.001	0.010
DW-NSML550	5.50	11.00	6	50	27.50	5.00	1.5	0.001	0.010
DW-NSML600	6.00	12.00	6	50	30.00	5.00	1.5	0.001	0.010
DW-NSML650	6.50	13.00	6	50	32.50	5.00	1.5	0.001	0.009
DW-NSML700	7.00	14.00	6	50	35.00	5.00	1.5	0.001	0.008

I_H=Hold current: maximum current at which the device will not trip at 25℃ still air.

I_T=Trip current: minimum current at which the device will always trip at 25℃ still air.

V_{max}=Maximum voltage device can withstand without damage at rated current.

I_{max}=Maximum fault current device can withstand without damage at rated voltage.

Max. Time-to-trip =Maximum time to trip(s) at assigned current.

Pd_{typ}=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

R_{min}=Minimum device resistance at 25℃ prior to tripping.

R_{1max}=Maximum device resistance measured in the nontripped state 1 hour post reflow.

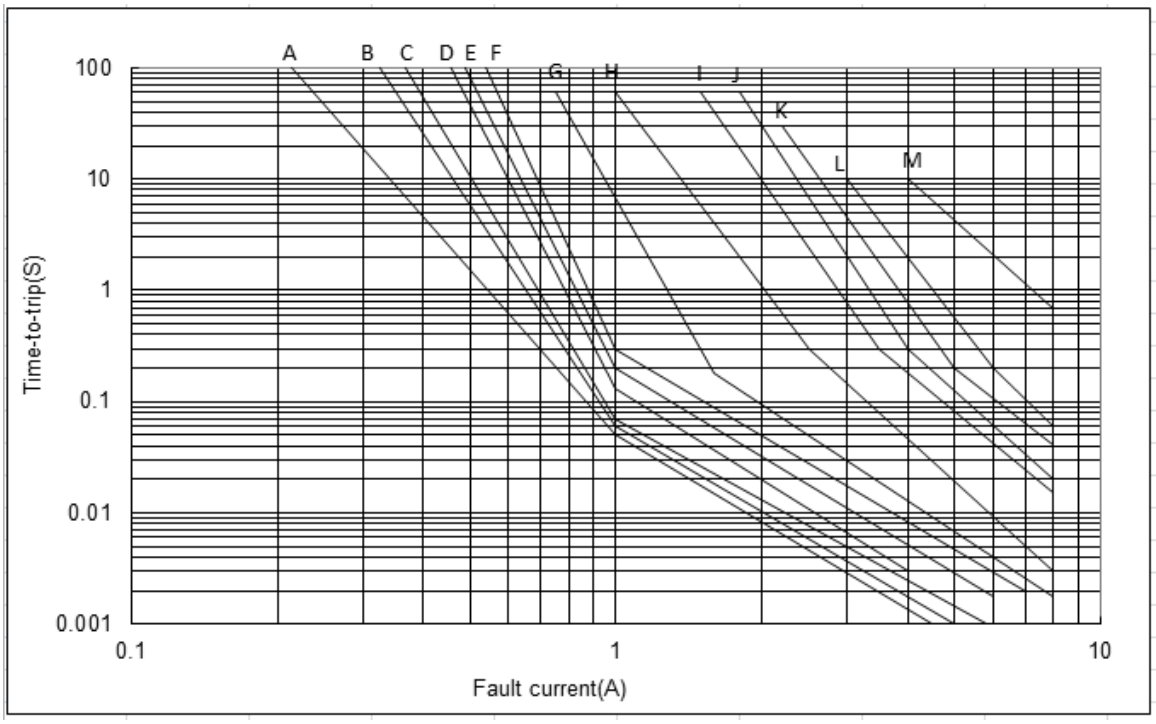
Thermal Derating Chart-IH(A)

Part number	Maximum Ambient Temperature									
	-40℃	-20℃	0℃	20℃	25℃	40℃	50℃	60℃	70℃	85℃
DW-NSM005	0.09	0.08	0.06	0.05	0.05	0.04	0.036	0.033	0.029	0.02
DW-NSM010	0.17	0.15	0.13	0.11	0.10	0.09	0.080	0.070	0.060	0.04
DW-NSM012	0.19	0.16	0.14	0.13	0.125	0.10	0.09	0.08	0.07	0.04
DW-NSM016	0.25	0.20	0.18	0.16	0.16	0.14	0.12	0.11	0.09	0.06
DW-NSM020	0.31	0.26	0.22	0.21	0.20	0.18	0.16	0.15	0.13	0.07
DW-NSM020/24	0.31	0.26	0.22	0.21	0.20	0.18	0.16	0.15	0.13	0.07
DW-NSM025/16	0.38	0.33	0.28	0.26	0.25	0.23	0.20	0.19	0.16	0.10
DW-NSM025/24	0.38	0.33	0.28	0.26	0.25	0.23	0.20	0.19	0.16	0.10
DW-NSM035	0.51	0.46	0.39	0.36	0.35	0.30	0.27	0.26	0.20	0.16
DW-NSM035/16	0.51	0.46	0.39	0.36	0.35	0.30	0.27	0.26	0.20	0.16

Part number	Maximum Ambient Temperature									
	-40℃	-20℃	0℃	20℃	25℃	40℃	50℃	60℃	70℃	85℃
DW-NSM035/24	0.51	0.46	0.39	0.36	0.35	0.30	0.27	0.26	0.20	0.16
DW-NSM050	0.77	0.64	0.56	0.52	0.50	0.45	0.40	0.35	0.32	0.23
DW-NSM050/16	0.77	0.64	0.56	0.52	0.50	0.45	0.40	0.35	0.32	0.23
DW-NSM050/24	0.77	0.64	0.56	0.52	0.50	0.45	0.40	0.35	0.32	0.23
DW-NSM075	1.12	1.01	0.88	0.78	0.75	0.66	0.58	0.53	0.46	0.33
DW-NSM075/8	1.12	1.01	0.88	0.78	0.75	0.66	0.58	0.53	0.46	0.33
DW-NSM075/16	1.12	1.01	0.88	0.78	0.75	0.66	0.58	0.53	0.46	0.33
DW-NSM090/8	1.39	1.15	1.01	0.93	0.90	0.81	0.71	0.63	0.58	0.41
DW-NSM100/8	1.54	1.28	1.13	1.04	1.00	0.90	0.81	0.70	0.62	0.45
DW-NSM110	1.61	1.44	1.27	1.12	1.10	0.94	0.85	0.77	0.63	0.48
DW-NSM110/8	1.61	1.44	1.27	1.12	1.10	0.94	0.85	0.77	0.63	0.48
DW-NSML110/8	1.61	1.44	1.27	1.12	1.10	0.94	0.85	0.77	0.63	0.48
DW-NSM125/8	1.93	1.60	1.40	1.30	1.25	1.13	1.00	0.88	0.80	0.58
DW-NSM150	2.03	1.80	1.63	1.55	1.50	1.24	1.11	1.03	0.88	0.69
DW-NSM150/8	2.03	1.80	1.63	1.55	1.50	1.24	1.11	1.03	0.88	0.69
DW-NSML150	2.01	1.77	1.62	1.53	1.50	1.22	1.12	1.04	0.87	0.61
DW-NSML150/8	2.03	1.80	1.63	1.55	1.50	1.24	1.11	1.03	0.88	0.69
DW-NSML150/12	2.03	1.80	1.63	1.55	1.50	1.24	1.11	1.03	0.88	0.69
DW-NSML150/16	2.03	1.80	1.63	1.55	1.50	1.24	1.11	1.03	0.88	0.69
DW-NSML175	2.34	2.05	1.89	1.80	1.75	1.44	1.31	1.20	1.00	0.72
DW-NSM175/8	2.34	2.05	1.89	1.80	1.75	1.44	1.31	1.20	1.00	0.72
DW-NSML175/12	2.34	2.05	1.89	1.80	1.75	1.44	1.31	1.20	1.00	0.72
DW-NSML175/16	2.34	2.05	1.89	1.80	1.75	1.44	1.31	1.20	1.00	0.72
DW-NSM200/8	2.68	2.33	2.15	2.03	2.00	1.66	1.49	1.37	1.14	0.80
DW-NSML200	2.68	2.33	2.15	2.03	2.00	1.66	1.49	1.37	1.14	0.80
DW-NSML200/8	2.68	2.33	2.15	2.03	2.00	1.66	1.49	1.37	1.14	0.80
DW-NSML200/12	2.68	2.33	2.15	2.03	2.00	1.66	1.49	1.37	1.14	0.80
DW-NSML200/16	2.68	2.33	2.15	2.03	2.00	1.66	1.49	1.37	1.14	0.80
DW-NSML260	3.49	3.05	2.82	2.63	2.60	2.15	1.93	1.78	1.49	1.04
DW-NSML260/12	3.49	3.05	2.82	2.63	2.60	2.15	1.93	1.78	1.49	1.04
DW-NSML260/16	3.49	3.05	2.82	2.63	2.60	2.15	1.93	1.78	1.49	1.04
DW-NSML300	4.03	3.51	3.26	3.04	3.00	2.49	2.23	2.06	1.71	1.20
DW-NSML300/12	4.03	3.51	3.26	3.04	3.00	2.49	2.23	2.06	1.71	1.20
DW-NSML300/16	4.03	3.51	3.26	3.04	3.00	2.49	2.23	2.06	1.71	1.20
DW-NSML350	4.70	4.10	3.80	3.55	3.50	2.90	2.60	2.40	2.00	1.40
DW-NSML350/12	4.70	4.10	3.80	3.55	3.50	2.90	2.60	2.40	2.00	1.40
DW-NSML350/16	4.70	4.10	3.80	3.55	3.50	2.90	2.60	2.40	2.00	1.40
DW-NSML380	6.40	4.85	4.25	4.00	3.80	3.20	2.80	2.49	2.05	1.43
DW-NSML380/12	6.40	4.85	4.25	4.00	3.80	3.20	2.80	2.49	2.05	1.43
DW-NSML400	6.74	5.11	4.47	4.21	4.00	3.37	2.95	2.62	2.16	1.51
DW-NSML400/12	6.74	5.11	4.47	4.21	4.00	3.37	2.95	2.62	2.16	1.51

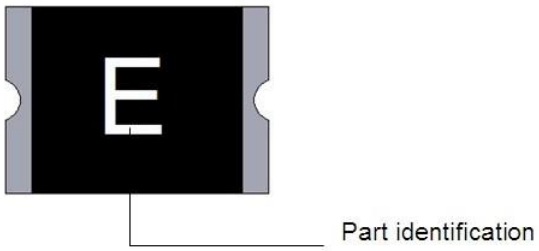
Part number	Maximum Ambient Temperature									
	-40℃	-20℃	0℃	20℃	25℃	40℃	50℃	60℃	70℃	85℃
DW-NSML450	6.85	5.92	5.47	4.75	4.50	3.73	3.34	3.00	2.35	1.55
DW-NSML450/12	6.85	5.92	5.47	4.75	4.50	3.73	3.34	3.00	2.35	1.55
DW-NSML500	7.30	6.34	5.66	5.07	5.00	4.42	3.85	3.47	3.12	2.38
DW-NSML550	8.03	6.97	6.23	5.58	5.50	4.86	4.24	3.82	3.43	2.62
DW-NSML600	8.46	7.60	6.75	6.09	6.00	5.15	4.25	4.00	3.44	2.86
DW-NSML650	9.15	8.20	7.30	6.58	6.50	5.58	4.62	4.20	3.75	3.12
DW-NSML700	9.80	8.78	7.85	7.07	7.00	5.95	4.95	4.50	4.00	3.30

Typical Time-to-Trip Curves at 25℃



DW-NSM Series
A = DW-NSM005
B = DW-NSM010
C = DW-NSM012
D = DW-NSM016
E = DW-NSM020 DW-NSM020/24
F = DW-NSM025 DW-NSM025/24
G = DW-NSM035 DW-NSM035/16 DW-NSM035/24
H = DWW-NSM050 DW-NSM050/16 DW-NSM050/24
I = DW-NSM075 DW-NSM075/8 DW-NSM075/16
J = DW-NSM090/8 DW-NSM100/8
K = DW-NSM110 DW-NSM110
L = DW-NSM150 DW-NSM150/8
M = DW-NSM200/8

Marking System



Test Procedures And Requirements

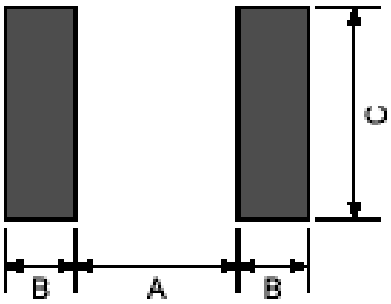
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25℃	$R_{min} \leqslant R \leqslant R_{max}$
Time to Trip	Specified current, V_{max}, 25℃	T≤maximum Time to Trip
Hold Current	60min, at I_H	No trip
Trip Cycle Life	V_{max}, I_{max}, 100cycles	No arcing or burning
Trip Endurance	V_{max}, 2hours	No arcing or burning

Packaging and Marking Information

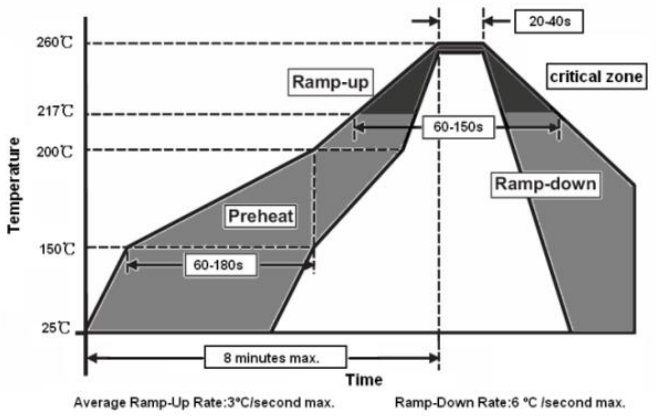
Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm(In.)]			Agency Recognition
				Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)	
DW-NSM005	4000	1206A	X	1.80	1.00	1.80	TUV
DW-NSM010	4000	1206A	U	1.80	1.00	1.80	/
DW-NSM012	4000	1206A	P	1.80	1.00	1.80	UL,TUV
DW-NSM016	4000	1206A	T	1.80	1.00	1.80	UL,TUV
DW-NSM020	4000	1206A	C	1.80	1.00	1.80	UL,TUV
DW-NSM020/24	4000	1206A	C	1.80	1.00	1.80	UL
DW-NSM025/16	4000	1206A	C	1.80	1.00	1.80	UL,TUV
DW-NSM025/24	4000	1206A	C	1.80	1.00	1.80	UL
DW-NSM035	4000	1206A	W	1.80	1.00	1.80	UL,TUV
DW-NSM035/16	4000	1206A	W	1.80	1.00	1.80	UL,TUV
DW-NSM035/24	4000	1206A	W	1.80	1.00	1.80	UL
DW-NSM050	4000	1206A	A	1.80	1.00	1.80	UL,TUV
DW-NSM050/16	4000	1206A	A	1.80	1.00	1.80	UL,TUV
DW-NSM050/24	4000	1206A	A	1.80	1.00	1.80	UL

Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm(In.)]			Agency Recognition
				Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)	
DW-NSM075	4000	1206A	Y	1.80	1.00	1.80	UL,TUV
DW-NSM075/8	4000	1206A	Y	1.80	1.00	1.80	UL,TUV
DW-NSM075/16	4000	1206B	Y	1.80	1.00	1.80	UL,TUV
DW-NSM090/8	4000	1206A	S	1.80	1.00	1.80	UL,TUV
DW-NSM100/8	3500	1206B	M	1.80	1.00	1.80	UL,TUV
DW-NSM110	3500	1206B	O	1.80	1.00	1.80	UL,TUV
DW-NSM110/8	3500	1206B	O	1.80	1.00	1.80	UL,TUV
DW-NSML110/8	4000	1206A	O	1.80	1.00	1.80	UL,TUV
DW-NSM125/8	4000	1206B	Z	1.80	1.00	1.80	UL,TUV
DW-NSM150	4000	1206B	N	1.80	1.00	1.80	UL,TUV
DW-NSM150/8	4000	1206B	N	1.80	1.00	1.80	UL,TUV
DW-NSML150	4000	1206A	I	1.80	1.00	1.80	UL,TUV
DW-NSML150/8	4000	1206A	I	1.80	1.00	1.80	UL,TUV
DW-NSML150/12	4000	1206A	I	1.80	1.00	1.80	UL,TUV
DW-NSML150/16	4000	1206A	I1	1.80	1.00	1.80	UL
DW-NSML175	4000	1206A	J	1.80	1.00	1.80	UL,TUV
DW-NSM175/8	4000	1206A	J	1.80	1.00	1.80	UL,TUV
DW-NSML175/12	4000	1206A	J	1.80	1.00	1.80	UL,TUV
DW-NSML175/16	4000	1206A	J1	1.80	1.00	1.80	UL
DW-NSM200/8	4000	1206A	F	1.80	1.00	1.80	UL,TUV
DW-NSML200	4000	1206A	F	1.80	1.00	1.80	UL,TUV
DW-NSML200/8	4000	1206A	F	1.80	1.00	1.80	UL,TUV
DW-NSML200/12	4000	1206A	F2	1.80	1.00	1.80	UL,TUV
DW-NSML200/16	3500	1206B	F6	1.80	1.00	1.80	UL
DW-NSML260	4000	1206A	K	1.80	1.00	1.80	UL,TUV
DW-NSML260/12	4000	1206A	K	1.80	1.00	1.80	UL,TUV
DW-NSML260/16	4000	1206A	K1	1.80	1.00	1.80	UL
DW-NSML300	4000	1206A	R	1.80	1.00	1.80	UL,TUV
DW-NSML300/12	4000	1206A	R-	1.80	1.00	1.80	UL,TUV
DW-NSML300/16	4000	1206A	R-	1.80	1.00	1.80	UL
DW-NSML350	4000	1206A	E	1.80	1.00	1.80	UL,TUV
DW-NSML350/12	4000	1206A	E	1.80	1.00	1.80	UL,TUV
DW-NSML350/16	3500	1206B	E2	1.80	1.00	1.80	UL
DW-NSML380	4000	1206A	H	1.80	1.00	1.80	UL,TUV
DW-NSML380/12	4000	1206A	H	1.80	1.00	1.80	UL,TUV
DW-NSML400	4000	1206A	L4	1.80	1.00	1.80	UL,TUV
DW-NSML400/12	4000	1206A	L4	1.80	1.00	1.80	UL,TUV
DW-NSML450	4000	1206A	L6	1.80	1.00	1.80	UL,TUV
DW-NSML450/12	4000	1206A	LC	1.80	1.00	1.80	UL,TUV
DW-NSML500	4000	1206A	Q	1.80	1.00	1.80	UL,TUV

Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm(In.)]			Agency Recognition
				Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)	
DW-NSML550	4000	1206A	L5	1.80	1.00	1.80	UL,TUV
DW-NSML600	4000	1206A	L7	1.80	1.00	1.80	UL,TUV
DW-NSML650	4000	1206A	L65	1.80	1.00	1.80	UL,TUV
DW-NSML700	4000	1206A	L70	1.80	1.00	1.80	UL,TUV



Solder Pad Layouts



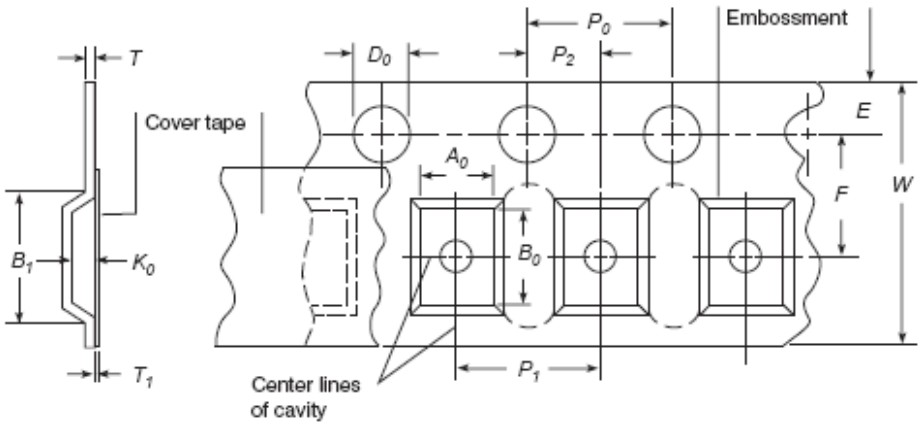
* Recommended reflow methods: IR, Vapor phase oven, hot air oven, wave solder.
* Devices can be cleaned using standard industry methods and solvents.

Notes:

If reflow temperatures exceed the recommended profile,
devices may not meet the performance requirements.

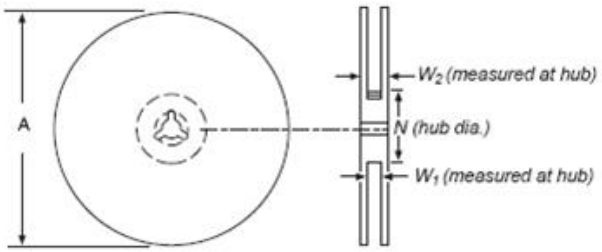
Tape Specification And Reel Dimensions

1206(A)	**W**	**P0**	**P1**	**P2**	**A0**	**B0**
	8.00±0.20	4.00±0.10	4.00±0.10	2.00±0.05	1.77±0.10	3.40±0.10
	D0	**F**	**E**	**T**	**K0**	***l***
	1.55±0.05	3.50±0.10	1.75±0.10	0.22±0.05	1.04±0.10	***l***
1206(B)	**W**	**P0**	**P1**	**P2**	**A0**	**B0**
	8.00±0.20	4.00±0.10	4.00±0.10	2.00±0.05	1.77±0.10	3.40±0.10
	D0	**F**	**E**	**T**	**K0**	***l***
	1.55±0.05	3.50±0.10	1.75±0.10	0.22±0.05	1.35±0.10	/



Reel Dimensions

Tape spc code	A	N	W_1	W_2
1206	180+0/-1.5	60+1/-0	9.0+1/-0	13.0+1/-0



Storage

The maximum ambient temperature shall not exceed 40℃. Storage temperatures higher than 40℃ could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 70%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the solderability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present.

Warning:

PPTC devices are intended for protection against occasional over-current or over-temperature fault conditions, and should not be used when repeated fault conditions are anticipated. Operation beyond maximum ratings or improper use may result in device damage and possible electrical arcing and flame.

Notes:

The specification is intended to present application, product and technical data to assist the user in selecting PPTC circuit production devices. However, users should independently evaluate and test the suitability of each product. Wayon makes no warranties as to the accuracy or completeness of the information and disclaims any liability resulting from its use. Wayon's only obligations are those in the Wayon Standard Terms and Conditions of Sale and in no case will Wayon be liable for any incidental, indirect, or consequential damages arising from the sale, resale, or misuse of its products. Wayon reserves the right to change or update, without notice, any information contained in this specification.