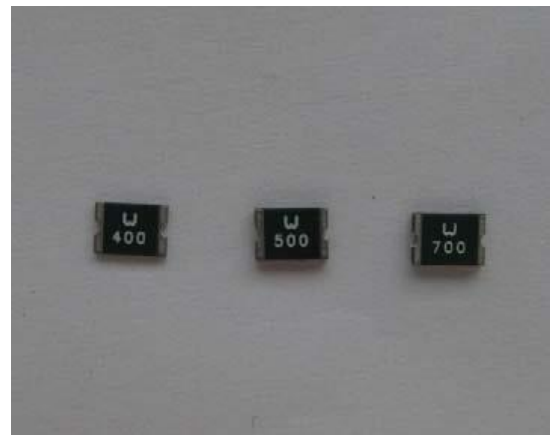




Features

- Small size of 4532mm/1812mils
- Fast tripping resettable circuit protection
- Surface mount packaging for automated assembly
- Agency recognition: UL、TUV



Product Dimensions

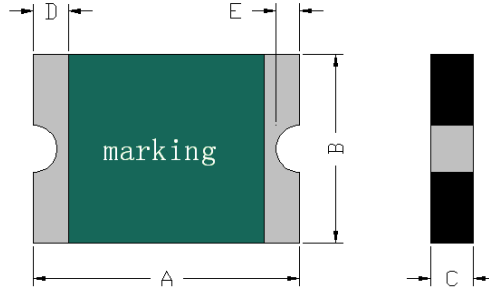
Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-MSM010	4.73	3.41	1.00	0.30	0.30
DW-MSM014	4.73	3.41	1.00	0.30	0.30
DW-MSM020	4.73	3.41	1.00	0.30	0.30
DW-MSM050	4.73	3.41	0.83	0.30	0.30
DW-MSM050/24	4.73	3.41	1.05	0.30	0.30
DW-MSM075	4.73	3.41	0.83	0.30	0.30
DW-MSM075/24	4.73	3.41	1.30	0.30	0.30
DW-MSM110	4.73	3.41	0.83	0.30	0.30
DW-MSM110/8	4.73	3.41	0.83	0.30	0.30
DW-MSM110/16	4.73	3.41	1.05	0.30	0.30
DW-MSM110/24	4.73	3.41	1.30	0.30	0.30
DW-MSM125	4.73	3.41	1.05	0.30	0.30
DW-MSM125/8	4.73	3.41	1.05	0.30	0.30
DW-MSM125/16	4.73	3.41	1.05	0.30	0.30
DW-MSM125/24	4.73	3.41	1.30	0.30	0.30
DW-MSM150	4.73	3.41	1.05	0.30	0.30
DW-MSM150/8	4.73	3.41	1.05	0.30	0.30
DW-MSM150/16	4.73	3.41	1.70	0.30	0.30
DW-MSM150/24	4.73	3.41	1.70	0.30	0.30
DW-MSM160	4.73	3.41	1.05	0.30	0.30
DW-MSM160/8	4.73	3.41	1.05	0.30	0.30
DW-MSM160/16	4.73	3.41	1.70	0.30	0.30
DW-MSM175/8	4.73	3.41	1.05	0.30	0.30
DW-MSM175/16	4.73	3.41	1.70	0.30	0.30
DW-MSML190	4.73	3.41	0.80	0.30	0.30



Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-MSML190/12	4.73	3.41	0.80	0.30	0.30
DW-MSM200	4.73	3.41	1.05	0.30	0.30
DW-MSM200/8	4.73	3.41	1.30	0.30	0.30
DW-MSM200/16	4.73	3.41	1.70	0.30	0.30
DW-MSML200/16	4.73	3.41	1.00	0.30	0.30
DW-MSML250	4.73	3.41	0.80	0.30	0.30
DW-MSML250/12	4.73	3.41	0.80	0.30	0.30
DW-MSM260	4.73	3.41	1.30	0.30	0.30
DW-MSM260/8	4.73	3.41	1.80	0.30	0.30
DW-MSM260/16	4.73	3.41	2.50	0.30	0.30
DW-MSML260/16	4.73	3.41	1.00	0.30	0.30
DW-MSML300/16	4.73	3.41	0.90	0.30	0.30
DW-MSML300/24	4.73	3.41	0.90	0.30	0.30
DW-MSML350	4.73	3.41	1.00	0.30	0.30
DW-MSML350/12	4.73	3.41	1.00	0.30	0.30
DW-MSML350/16	4.73	3.41	1.00	0.30	0.30
DW-MSML350/24	4.73	3.41	1.00	0.30	0.30
DW-MSML400	4.73	3.41	0.80	0.30	0.30
DW-MSML400/12	4.73	3.41	0.80	0.30	0.30
DW-MSML400/16	4.73	3.41	1.00	0.30	0.30
DW-MSML400/24	4.73	3.41	1.00	0.30	0.30
DW-MSML450	4.73	3.41	0.80	0.30	0.30
DW-MSML450/12	4.73	3.41	0.80	0.30	0.30
DW-MSML450/16	4.73	3.41	1.40	0.30	0.30
DW-MSML450/24	4.73	3.41	1.40	0.30	0.30
DW-MSML500	4.73	3.41	1.00	0.30	0.30
DW-MSML500/12	4.73	3.41	1.00	0.30	0.30
DW-MSML550	4.73	3.41	1.00	0.30	0.30
DW-MSML550/12	4.73	3.41	1.00	0.30	0.30
DW-MSML600	4.73	3.41	1.00	0.30	0.30
DW-MSML600/12	4.73	3.41	1.00	0.30	0.30
DW-MSML650	4.73	3.41	1.00	0.30	0.30
DW-MSML650/12	4.73	3.41	1.00	0.30	0.30
DW-MSML700	4.73	3.41	1.00	0.30	0.30
DW-MSML700/12	4.73	3.41	1.00	0.30	0.30
DW-MSML750	4.73	3.41	1.40	0.30	0.30
DW-MSML750/12	4.73	3.41	1.00	0.30	0.30
DW-MSML800	4.73	3.41	1.40	0.30	0.30
DW-MSML800/12	4.73	3.41	1.40	0.30	0.30
DW-MSML850	4.73	3.41	1.40	0.30	0.30
DW-MSML800/12	4.73	3.41	1.40	0.30	0.30



Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-MSML900	4.73	3.41	1.40	0.30	0.30
DW-MSML900/12	4.73	3.41	1.40	0.30	0.30



Electrical Characteristics at 25°C

Part number	I_H	I_T	V_{max}	I_{max}	Max. Time-to-trip		$P_{d\ typ}$	R_{min}	R_{1max}
	(A)	(A)	(V)	(A)	(A)	(S)	(W)	(Ω)	(Ω)
DW-MSM010	0.10	0.20	60	10	1.50	0.15	1.0	1.600	15.000
DW-MSM014	0.14	0.34	60	10	1.50	0.15	1.0	1.500	6.000
DW-MSM020	0.20	0.40	30	10	6.00	0.02	1.0	0.600	5.000
DW-MSM050	0.50	1.00	15	40	8.00	0.15	1.0	0.150	1.000
DW-MSM050/24	0.50	1.00	24	40	8.00	0.15	1.0	0.150	1.000
DW-MSM075	0.75	1.50	13.2	40	8.00	0.20	1.0	0.100	0.480
DW-MSM075/24	0.75	1.50	24	40	8.00	0.20	1.0	0.100	0.480
DW-MSM110	1.10	2.20	6	40	8.00	0.30	1.0	0.040	0.260
DW-MSM110/8	1.10	2.20	8	40	8.00	0.30	1.0	0.040	0.260
DW-MSM110/16	1.10	2.20	16	40	8.00	0.30	1.0	0.040	0.260
DW-MSM110/24	1.10	2.20	24	40	8.00	0.30	1.0	0.040	0.260
DW-MSM125	1.25	2.50	6	40	8.00	0.40	1.0	0.040	0.250
DW-MSM125/8	1.25	2.50	8	40	8.00	0.40	1.0	0.040	0.250
DW-MSM125/16	1.25	2.50	16	40	8.00	0.40	1.0	0.040	0.250
DW-MSM125/24	1.25	2.50	24	40	8.00	0.40	1.0	0.040	0.250
DW-MSM150	1.50	3.00	6	40	8.00	0.50	1.0	0.040	0.120
DW-MSM150/8	1.50	3.00	8	40	8.00	0.50	1.0	0.040	0.120
DW-MSM150/16	1.50	3.00	16	40	8.00	0.50	1.0	0.040	0.120
DW-MSM150/24	1.50	3.00	24	40	8.00	0.50	1.0	0.040	0.120
DW-MSM160	1.60	3.20	6	40	8.00	1.00	1.0	0.030	0.100
DW-MSM160/8	1.60	3.20	8	40	8.00	1.00	1.0	0.030	0.100
DW-MSM160/16	1.60	3.20	16	40	8.00	1.00	1.0	0.030	0.100
DW-MSM175/8	1.75	3.50	8	40	8.00	1.50	1.0	0.025	0.090
DW-MSM175/16	1.75	3.50	16	40	8.00	1.50	1.0	0.025	0.090
DW-MSML190	1.90	4.90	6	50	8.00	5.00	1.5	0.004	0.024
DW-MSML190/12	1.90	4.90	12	50	8.00	5.00	1.5	0.004	0.024



Part number	I _H	I _T	V _{max}	I _{max}	Max.Time-to-trip		Pd _{typ}	R _{min}	R _{1max}
	(A)	(A)	(V)	(A)	(A)	(S)	(W)	(Ω)	(Ω)
DW-MSM200	2.00	3.50	6	40	8.00	2.00	1.0	0.020	0.075
DW-MSM200/8	2.00	3.50	8	40	8.00	2.00	1.0	0.020	0.075
DW-MSM200/16	2.00	3.50	16	40	8.00	2.00	1.0	0.020	0.075
DW-MSML200/16	2.00	4.00	16	50	10.00	5.00	1.0	0.004	0.022
DW-MSML250	2.50	8.00	6	50	8.00	5.00	1.5	0.004	0.020
DW-MSML250/12	2.50	8.00	12	50	8.00	5.00	1.5	0.004	0.020
DW-MSM260	2.60	5.20	6	40	8.00	2.50	1.0	0.015	0.047
DW-MSM260/8	2.60	5.20	8	40	8.00	2.50	1.0	0.015	0.047
DW-MSM260/16	2.60	5.20	16	40	8.00	2.50	1.0	0.015	0.020
DW-MSML260/16	2.60	5.20	16	50	13.00	5.00	1.0	0.003	0.020
DW-MSML300/16	3.00	6.00	16	50	15.00	5.00	1.0	0.001	0.015
DW-MSML300/24	3.00	6.00	24	20	15.00	5.00	1.0	0.001	0.015
DW-MSML350	3.50	9.00	6	50	17.50	5.00	1.5	0.004	0.015
DW-MSML350/12	3.50	9.00	12	50	17.50	5.00	1.5	0.004	0.015
DW-MSML350/16	3.50	7.00	16	50	17.50	5.00	1.0	0.004	0.015
DW-MSML350/24	3.50	7.00	24	20	17.50	5.00	1.0	0.004	0.015
DW-MSML400	4.00	8.00	6	50	20.00	5.00	1.5	0.004	0.014
DW-MSML400/12	4.00	8.00	12	50	20.00	5.00	1.5	0.004	0.014
DW-MSML400/16	4.00	8.00	16	50	20.00	5.00	1.0	0.004	0.014
DW-MSML400/24	4.00	8.00	20	20	20.00	5.00	1.0	0.004	0.014
DW-MSML450	4.50	9.00	6	50	22.50	5.00	1.5	0.004	0.012
DW-MSML450/12	4.50	9.00	12	50	22.50	5.00	1.5	0.004	0.012
DW-MSML450/16	4.50	9.00	16	50	22.50	5.00	1.0	0.004	0.012
DW-MSML450/24	4.50	9.00	24	25	22.50	5.00	1.0	0.004	0.012
DW-MSML500	5.00	10.00	6	50	25.00	5.00	1.5	0.003	0.012
DW-MSML500/12	5.00	10.00	12	50	25.00	5.00	1.5	0.003	0.012
DW-MSML550	5.50	11.00	6	50	27.50	5.00	1.5	0.002	0.010
DW-MSML550/12	5.50	11.00	12	50	27.50	5.00	1.5	0.002	0.010
DW-MSML600	6.00	12.00	6	50	30.00	5.00	1.5	0.001	0.010
DW-MSML600/12	6.00	12.00	12	50	30.00	5.00	1.5	0.001	0.010
DW-MSML650	6.50	13.00	6	50	32.50	5.00	1.5	0.001	0.009
DW-MSML650/12	6.50	13.00	12	50	32.50	5.00	1.5	0.001	0.009
DW-MSML700	7.00	14.00	6	50	35.00	5.00	1.5	0.001	0.008
DW-MSML700/12	7.00	14.00	12	50	35.00	5.00	1.5	0.001	0.008
DW-MSML750	7.50	15.00	6	50	37.50	5.00	1.5	0.0005	0.008
DW-MSML750/12	7.50	15.00	12	50	37.50	5.00	1.5	0.0005	0.008
DW-MSML800	8.00	16.00	6	50	40.00	5.00	1.5	0.0005	0.007
DW-MSML800/12	8.00	16.00	12	50	40.00	5.00	1.5	0.0005	0.007
DW-MSML850	8.50	17.00	6	50	42.50	5.00	1.5	0.0005	0.006
DW-MSML850/12	8.50	17.00	12	50	42.50	5.00	1.5	0.0005	0.006
DW-MSML900	9.00	18.00	6	50	45.00	5.00	1.5	0.0005	0.005

Part number	I _H	I _T	V _{max}	I _{max}	Max.Time-to-trip	Pd _{typ}	R _{min}	R _{1max}	
	(A)	(A)	(V)	(A)	(A) (S)	(W)	(Ω)	(Ω)	
DW-MSML900/12	9.00	18.00	12	50	45.00	5.00	1.5	0.0005	0.005

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

I_T=Trip current: minimum current at which the device will always trip at 25°C 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°C prior to tripping.

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

Thermal Derating Chart-IH(A)

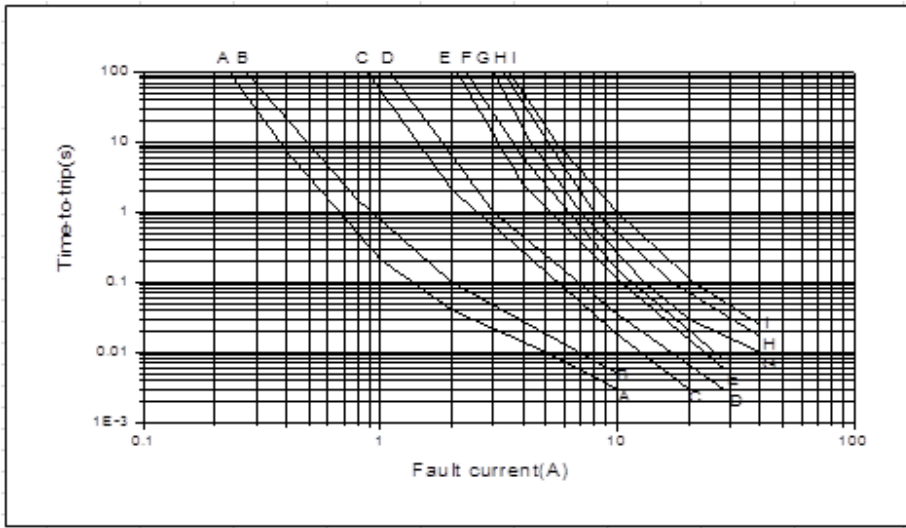
Part number	Maximum Ambient Temperature									
	-40°C	-20°C	0°C	20°C	25°C	40°C	50°C	60°C	70°C	85°C
DW-MSM010	0.17	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.04
DW-MSM014	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.07	0.05
DW-MSM020	0.33	0.29	0.26	0.22	0.20	0.17	0.16	0.15	0.13	0.09
DW-MSM050	0.76	0.69	0.61	0.53	0.50	0.45	0.40	0.36	0.33	0.23
DW-MSM050/24	0.78	0.69	0.59	0.52	0.50	0.48	0.41	0.37	0.33	0.23
DW-MSM075	1.11	1.02	0.89	0.80	0.75	0.65	0.59	0.54	0.47	0.38
DW-MSM075/24	1.12	1.02	0.89	0.79	0.75	0.66	0.58	0.53	0.47	0.39
DW-MSM110	1.65	1.50	1.32	1.15	1.10	0.99	0.85	0.78	0.68	0.52
DW-MSM110/8	1.65	1.50	1.32	1.15	1.10	0.99	0.85	0.78	0.68	0.52
DW-MSM110/16	1.65	1.50	1.32	1.15	1.10	0.99	0.85	0.78	0.68	0.52
DW-MSM110/24	1.65	1.49	1.29	1.15	1.10	0.95	0.85	0.79	0.66	0.53
DW-MSM125	1.89	1.64	1.41	1.28	1.25	1.09	0.98	0.86	0.74	0.56
DW-MSM125/8	1.89	1.64	1.41	1.28	1.25	1.09	0.98	0.86	0.74	0.56
DW-MSM125/16	1.89	1.64	1.41	1.28	1.25	1.09	0.98	0.86	0.74	0.56
DW-MSM125/24	1.89	1.69	1.46	1.29	1.25	1.09	0.95	0.89	0.76	0.59
DW-MSM150	2.28	2.05	1.85	1.55	1.50	1.26	1.14	1.05	0.92	0.73
DW-MSM150/8	2.28	2.05	1.85	1.55	1.50	1.26	1.14	1.05	0.92	0.73
DW-MSM150/16	2.28	2.05	1.85	1.55	1.50	1.26	1.14	1.05	0.92	0.73
DW-MSM150/24	2.28	2.05	1.85	1.55	1.50	1.26	1.14	1.05	0.92	0.73
DW-MSM160	2.45	2.15	1.89	1.64	1.60	1.34	1.25	1.15	0.96	0.79
DW-MSM160/8	2.45	2.15	1.89	1.64	1.60	1.34	1.25	1.15	0.96	0.79
DW-MSM160/16	2.45	2.15	1.89	1.64	1.60	1.34	1.25	1.15	0.96	0.79
DW-MSM175/8	2.68	2.35	2.07	1.79	1.75	1.47	1.37	1.26	1.05	0.86
DW-MSM175/16	2.68	2.35	2.07	1.79	1.75	1.47	1.37	1.26	1.05	0.86
DW-MSML190	2.80	2.52	2.20	1.94	1.90	1.66	1.48	1.33	1.18	0.91
DW-MSML190/12	2.80	2.52	2.20	1.94	1.90	1.66	1.48	1.33	1.18	0.91
DW-MSM200	2.90	2.61	2.40	2.05	2.00	1.70	1.51	1.41	1.21	0.95
DW-MSM200/8	2.90	2.61	2.40	2.05	2.00	1.70	1.51	1.41	1.21	0.95



Part number	Maximum Ambient Temperature									
	-40℃	-20℃	0℃	20℃	25℃	40℃	50℃	60℃	70℃	85℃
DW-MSM200/16	2.90	2.61	2.40	2.05	2.00	1.70	1.51	1.41	1.21	0.95
DW-MSML200/16	2.90	2.61	2.40	2.05	2.00	1.70	1.51	1.41	1.21	0.95
DW-MSML250	3.71	3.33	2.92	2.58	2.50	2.21	1.95	1.78	1.53	1.19
DW-MSML250/12	3.71	3.33	2.92	2.58	2.50	2.21	1.95	1.78	1.53	1.19
DW-MSM260	3.80	3.61	3.12	2.64	2.60	2.28	2.10	1.85	1.61	1.29
DW-MSM260/8	3.80	3.61	3.12	2.64	2.60	2.28	2.10	1.85	1.61	1.29
DW-MSM260/16	3.80	3.61	3.12	2.64	2.60	2.28	2.10	1.85	1.61	1.29
DW-MSML260/16	3.80	3.61	3.12	2.64	2.60	2.28	2.10	1.85	1.61	1.29
DW-MSML300/16	4.41	3.99	3.44	3.07	3.00	2.65	2.31	2.16	1.84	1.43
DW-MSML300/24	4.41	3.99	3.44	3.07	3.00	2.65	2.31	2.16	1.84	1.43
DW-MSML350	5.17	4.66	4.07	3.59	3.50	3.09	2.73	2.47	2.16	1.69
DW-MSML350/12	5.17	4.66	4.07	3.59	3.50	3.09	2.73	2.47	2.16	1.69
DW-MSML350/16	5.17	4.66	4.07	3.59	3.50	3.09	2.73	2.47	2.16	1.69
DW-MSML350/24	5.17	4.66	4.07	3.59	3.50	3.09	2.73	2.47	2.16	1.69
DW-MSML400	5.90	5.30	4.63	4.10	4.00	3.50	3.13	2.85	2.45	1.93
DW-MSML400/12	5.90	5.30	4.63	4.10	4.00	3.50	3.13	2.85	2.45	1.93
DW-MSML400/16	5.90	5.30	4.63	4.10	4.00	3.50	3.13	2.85	2.45	1.93
DW-MSML400/24	5.90	5.30	4.63	4.10	4.00	3.50	3.13	2.85	2.45	1.93
DW-MSML450	6.60	5.95	5.20	4.63	4.50	3.96	3.50	3.20	2.78	2.15
DW-MSML450/12	6.60	5.95	5.20	4.63	4.50	3.96	3.50	3.20	2.78	2.15
DW-MSML450/16	6.60	5.95	5.20	4.63	4.50	3.96	3.50	3.20	2.78	2.15
DW-MSML450/24	6.60	5.95	5.20	4.63	4.50	3.96	3.50	3.20	2.78	2.15
DW-MSML500	7.36	6.66	5.80	5.13	5.00	4.40	3.90	3.50	3.05	2.40
DW-MSML500/12	7.36	6.66	5.80	5.13	5.00	4.40	3.90	3.50	3.05	2.40
DW-MSML550	8.12	7.32	6.40	5.65	5.50	4.85	4.28	3.88	3.40	2.65
DW-MSML550/12	8.12	7.32	6.40	5.65	5.50	4.85	4.28	3.88	3.40	2.65
DW-MSML600	8.88	8.00	6.99	6.15	6.00	5.10	4.55	4.00	3.40	2.55
DW-MSML600/12	8.88	8.00	6.99	6.15	6.00	5.10	4.55	4.00	3.40	2.55
DW-MSML650	9.65	8.66	7.58	6.65	6.50	5.53	4.95	4.33	3.68	2.75
DW-MSML650/12	9.65	8.66	7.58	6.65	6.50	5.53	4.95	4.33	3.68	2.75
DW-MSML700	10.63	9.33	8.15	7.17	7.00	5.95	5.31	4.67	3.97	2.98
DW-MSML700/12	10.63	9.33	8.15	7.17	7.00	5.95	5.31	4.67	3.97	2.98
DW-MSML750	11.35	9.95	8.70	7.64	7.50	6.35	5.68	5.00	4.25	3.17
DW-MSML750/12	11.35	9.95	8.70	7.64	7.50	6.35	5.68	5.00	4.25	3.17
DW-MSML800	11.78	10.56	9.25	8.23	8.00	7.05	6.25	5.50	4.95	3.95
DW-MSML800/12	11.78	10.56	9.25	8.23	8.00	7.05	6.25	5.50	4.95	3.95
DW-MSML850	12.50	11.23	9.82	8.70	8.50	7.45	6.63	5.83	5.26	4.20
DW-MSML850/12	12.50	11.23	9.82	8.70	8.50	7.45	6.63	5.83	5.26	4.20
DW-MSML900	13.25	11.87	10.36	9.26	9.00	7.92	7.05	6.20	5.55	4.45
DW-MSML900/12	13.25	11.87	10.36	9.26	9.00	7.92	7.05	6.20	5.55	4.45



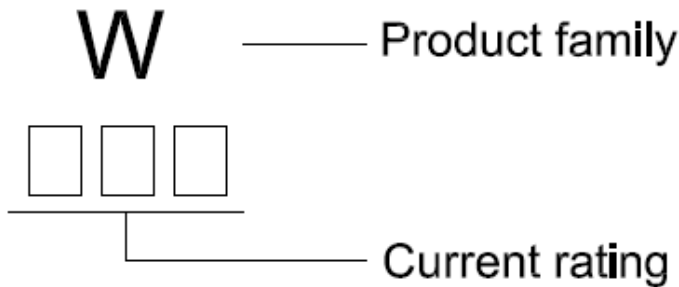
Typical Time-to-Trip Curves at 25°C



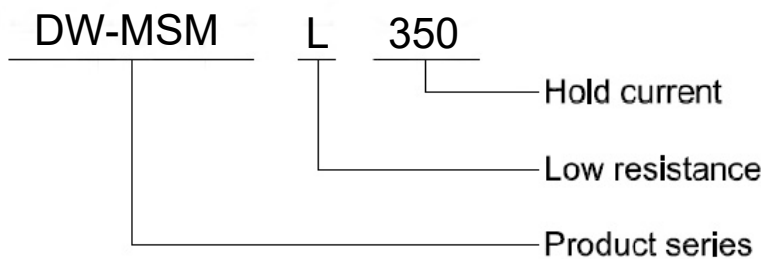
DW-MSM Series

- A = DW-MSM010, DW-MSM014
- B = DW-MSM020
- C = DW-MSM050, DW-MSM050/24
- D = DW-MSM075, DW-MSM075/24
- E = DW-MSM110, DW-MSM110/8,
DW-MSM110/16, DW-MSM110/24
- F = DW-MSM125, DW-MSM125/8
DW-MSM125/16, DW-MSM125/24
- G = DW-MSM150, DW-MSM150/8
DW-MSM150/16, DW-MSM150/24
- H = DW-MSM160, DW-MSM160/8
DW-MSM160/16
- I = DW-MSM175/8, DW-MSM175/16
- J = DW-MSM200, DW-MSM200/8
DW-MSM200/16
- K = DW-MSM190
- L = DW-MSM260, DW-MSM260/8
DW-MSM260/16

Marking System



Part Numbering System





Test Procedures And Requirements

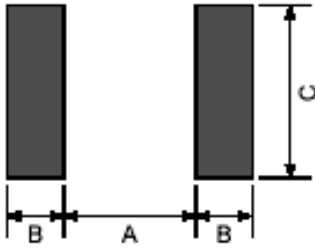
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, V_{max} , 25°C	$T \leq$ maximum Time to Trip
Hold Current	60min, at I_H	No trip
Trip Cycle Life	V_{max} , I_{max} , 100cycles	No arcing or burning
Trip Endurance	V_{max}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

Packaging and Marking Information

Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm]			Agency Recognition
				Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)	
DW-MSM010	2000	1812A	W010	3.45	1.78	3.15	UL,TUV
DW-MSM014	2000	1812A	W014	3.45	1.78	3.15	UL,TUV
DW-MSM020	2000	1812A	W020	3.45	1.78	3.15	UL,TUV
DW-MSM050	2000	1812A	W050	3.45	1.78	3.15	UL,TUV
DW-MSM050/24	2000	1812A	W050	3.45	1.78	3.15	TUV
DW-MSM075	2000	1812A	W075	3.45	1.78	3.15	UL,TUV
DW-MSM075/24	1000	1812A	W075	3.45	1.78	3.15	UL,TUV
DW-MSM110	2000	1812A	W110	3.45	1.78	3.15	UL,TUV
DW-MSM110/8	2000	1812A	W110	3.45	1.78	3.15	UL,TUV
DW-MSM110/16	2000	1812A	W110	3.45	1.78	3.15	UL,TUV
DW-MSM110/24	2000	1812A	W110	3.45	1.78	3.15	UL,TUV
DW-MSM125	2000	1812A	W125	3.45	1.78	3.15	UL,TUV
DW-MSM125/8	2000	1812A	W125	3.45	1.78	3.15	UL,TUV
DW-MSM125/16	2000	1812A	W125	3.45	1.78	3.15	UL,TUV
DW-MSM125/24	2000	1812A	W125	3.45	1.78	3.15	UL,TUV
DW-MSM150	2000	1812A	W150	3.45	1.78	3.15	UL,TUV
DW-MSM150/8	2000	1812A	W150	3.45	1.78	3.15	UL,TUV
DW-MSM150/16	1000	1812B	W150	3.45	1.78	3.15	UL,TUV
DW-MSM150/24	1000	1812B	W150	3.45	1.78	3.15	UL,TUV
DW-MSM160	2000	1812A	W160	3.45	1.78	3.15	UL,TUV
DW-MSM160/8	2000	1812A	W160	3.45	1.78	3.15	UL,TUV
DW-MSM160/16	1000	1812B	W160	3.45	1.78	3.15	UL,TUV
DW-MSM175/8	2000	1812A	W175	3.45	1.78	3.15	UL,TUV
DW-MSM175/16	1000	1812B	W175	3.45	1.78	3.15	UL
DW-MSML190	2000	1812A	W190	3.45	1.78	3.15	UL,TUV
DW-MSML190/12	2000	1812A	W190	3.45	1.78	3.15	UL
DW-MSM200	2000	1812A	W200	3.45	1.78	3.15	UL,TUV
DW-MSM200/8	2000	1812A	W200	3.45	1.78	3.15	UL,TUV
DW-MSM200/16	1000	1812B	W200	3.45	1.78	3.15	UL,TUV
DW-MSML200/16	2000	1812A	W200-1	3.45	1.78	3.15	UL
DW-MSML250	2000	1812A	W250	3.45	1.78	3.15	UL,TUV



Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm]			Agency Recognition
				Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)	
DW-MSML250/12	2000	1812A	W250	3.45	1.78	3.15	UL
DW-MSM260	1000	1812B	W260	3.45	1.78	3.15	UL,TUV
DW-MSM260/8	1000	1812B	W260	3.45	1.78	3.15	UL,TUV
DW-MSM260/16	1000	1812B	W260	3.45	1.78	3.15	UL,TUV
DW-MSML260/16	2000	1812A	W260	3.45	1.78	3.15	UL
DW-MSML300/16	2000	1812A	W300-1	3.45	1.78	3.15	UL
DW-MSML300/24	2000	1812A	W300-2	3.45	1.78	3.15	UL
DW-MSML350	2000	1812A	W350	3.45	1.78	3.15	UL,TUV
DW-MSML350/12	2000	1812A	W350	3.45	1.78	3.15	UL
DW-MSML350/16	2000	1812A	W350-1	3.45	1.78	3.15	UL
DW-MSML350/24	2000	1812A	W350-2	3.45	1.78	3.15	UL
DW-MSML400	2000	1812A	W400	3.45	1.78	3.15	UL,TUV
DW-MSML400/12	2000	1812A	W400	3.45	1.78	3.15	UL
DW-MSML400/16	2000	1812A	W400-1	3.45	1.78	3.15	UL
DW-MSML400/24	2000	1812A	W400-2	3.45	1.78	3.15	UL
DW-MSML450	2000	1812A	W450	3.45	1.78	3.15	UL,TUV
DW-MSML450/12	2000	1812A	W450	3.45	1.78	3.15	UL
DW-MSML450/16	2000	1812B	W450	3.45	1.78	3.15	UL
DW-MSML450/24	2000	1812B	W450	3.45	1.78	3.15	UL
DW-MSML500	2000	1812A	W500	3.45	1.78	3.15	UL,TUV
DW-MSML500/12	2000	1812A	W500-1	3.45	1.78	3.15	UL
DW-MSML550	2000	1812A	W550	3.45	1.78	3.15	UL,TUV
DW-MSML550/12	2000	1812A	W550-1	3.45	1.78	3.15	UL
DW-MSML600	2000	1812A	W600	3.45	1.78	3.15	UL,TUV
DW-MSML600/12	2000	1812A	W600-1	3.45	1.78	3.15	UL
DW-MSML650	2000	1812A	W650	3.45	1.78	3.15	UL,TUV
DW-MSML650/12	1800	1812B	W650-1	3.45	1.78	3.15	UL
DW-MSML700	2000	1812A	W700	3.45	1.78	3.15	UL,TUV
DW-MSML700/12	1800	1812B	W700-1	3.45	1.78	3.15	UL
DW-MSML750	1000	1812B	W750	3.45	1.78	3.15	UL,TUV
DW-MSML750/12	1800	1812B	W750	3.45	1.78	3.15	UL
DW-MSML800	1000	1813B	W800	3.45	1.78	3.15	UL,TUV
DW-MSML800/12	1800	1812B	W800-1	3.45	1.78	3.15	UL
DW-MSML850	1000	1814B	W850	3.45	1.78	3.15	UL,TUV
DW-MSML850/12	1800	1812B	W850-1	3.45	1.78	3.15	UL
DW-MSML900	1000	1815B	W900	3.45	1.78	3.15	UL,TUV
DW-MSML900/12	1800	1812B	W900-1	3.45	1.78	3.15	UL

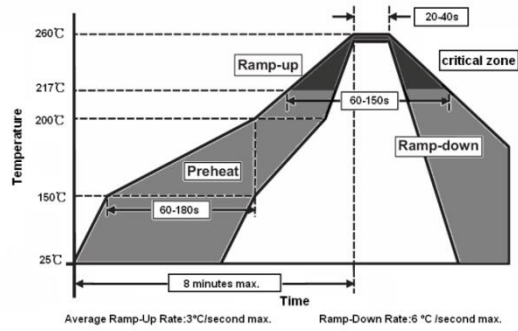


Solder Pad Layouts

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

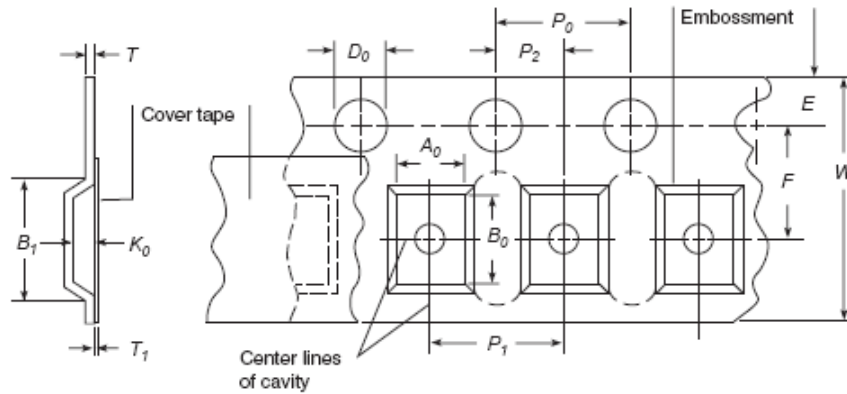
Notes:

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



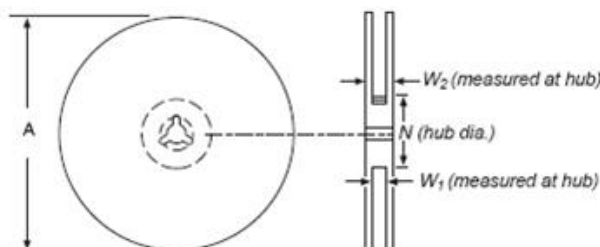
Tape Specification And Reel Dimensions

1812(A)	W	P0	P1	P2	A0	B0
	12.0±0.30	4.00±0.10	8.00±0.10	2.00±0.05	3.55±0.10	4.90±0.10
	D0	F	E	T	K0	/
	1.55±0.05	5.50±0.10	1.75±0.10	0.25±0.05	0.80±0.10	/
1812(B)	W	P0	P1	P2	A0	B0
	12.0±0.30	4.00±0.10	8.00±0.10	2.00±0.05	3.55±0.10	4.90±0.10
	D0	F	E	T	K0	/
	1.55±0.05	5.50±0.10	1.75±0.10	0.25±0.05	1.25±0.10	/



Reel Dimensions

Tape spc code	A	N	W ₁	W ₂
1812	180+0/-1.5	60+1/-0	13.0+1/-0	15.4+1/-0



Storage

The maximum ambient temperature shall not exceed 40°C. Storage temperatures higher than 40°C 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. DOWOSEMI makes no warranties as to the accuracy or completeness of the information and disclaims any liability resulting from its use. DOWOSEMI's only obligations are those in the DOWOSEMI Standard Terms and Conditions of Sale and in no case will DOWOSEMI be liable for any incidental, indirect, or consequential damages arising from the sale, resale, or misuse of its products. DOWOSEMI reserves the right to change or update, without notice, any information contained in this specification.