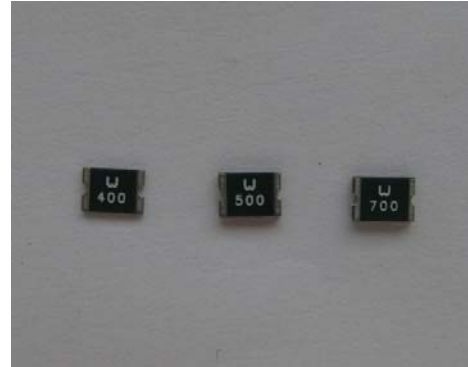




## Features

- ◇ Small size of 1812
- ◇ Low resistance
- ◇ Fast tripping resettable circuit protection
- ◇ Surface mount packaging for automated assembly
- ◇ Agency recognition: UL、CSA、TUV

◇

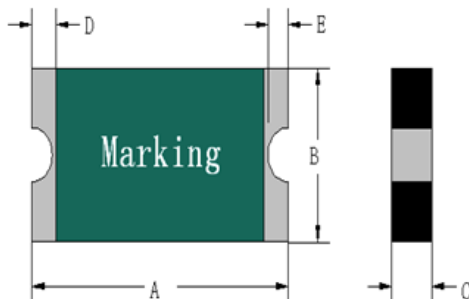


## Product Dimensions

Size 4532mm/1812 mils

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

Part number	A	B	C	D	E
	Max.	Max.	Max.	Min.	Min.
DW-MSML190	4.73	3.41	0.80	0.30	0.30
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-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-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-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-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-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-MSML700	4.73	3.41	1.00	0.30	0.30
DW-MSML750	4.73	3.41	1.40	0.30	0.30
DW-MSML800	4.73	3.41	1.40	0.30	0.30
DW-MSML850	4.73	3.41	1.40	0.30	0.30
DW-MSML900	4.73	3.41	1.40	0.30	0.30



# Thermal Derating Chart-IH(A)

Size 4532mm/1812 mils

Part number	Maximum ambient operating temperatures(°C)									
	-40	-20	0	20	25	40	50	60	70	85
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
DW-MSM200/16	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-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-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

*Size 4532mm/1812 mils*

Part number	Maximum ambient operating temperatures(°C)									
	-40	-20	0	20	25	40	50	60	70	85
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-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-MSML700	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-MSML800	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-MSML900	13.25	11.87	10.36	9.26	9.00	7.92	7.05	6.20	5.55	4.45

## Electrical Characteristics at 25°C

*Size 4532mm/1812 mils*

Part number	I <sub>H</sub>	I <sub>T</sub>	V <sub>max</sub>	I <sub>max</sub>	Max.Time-to-trip	Pd <sub>typ</sub>	R <sub>min</sub>	R <sub>1max</sub>	
	(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	0.070	0.250
DW-MSM125/8	1.25	2.50	8	40	8.00	0.40	1.0	0.070	0.250
DW-MSM125/16	1.25	2.50	16	40	8.00	0.40	1.0	0.070	0.250
DW-MSM125/24	1.25	2.50	24	40	8.00	0.40	1.0	0.070	0.250
DW-MSM150	1.50	3.00	6	40	8.00	0.50	1.0	0.040	0.110
DW-MSM150/8	1.50	3.00	8	40	8.00	0.50	1.0	0.040	0.110
DW-MSM150/16	1.50	3.00	16	40	8.00	0.50	1.0	0.040	0.110
DW-MSM150/24	1.50	3.00	24	40	8.00	0.50	1.0	0.040	0.110
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

Size 4532mm/1812 mils

Part number	$I_H$	$I_T$	$V_{max}$	$I_{max}$	Max.Time-to-trip		$P_{dtyp}$	$R_{min}$	$R_{1max}$
	(A)	(A)	(V)	(A)	(A)	(S)	(W)	( $\Omega$ )	( $\Omega$ )
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
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-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	0.047
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-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-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-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-MSML700	7.00	14.00	6	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-MSML800	8.00	16.00	6	50	40.00	5.00	1.5	0.0005	0.007
DW-MSML850	7.50	17.00	6	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

$I_H$ =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.

$T_{trip}$ =Maximum time to trip at assigned current.

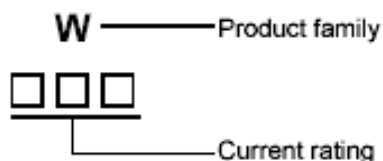
$P_{dtyp}$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{min}$ =Minimum device resistance at 25°C prior to tripping.

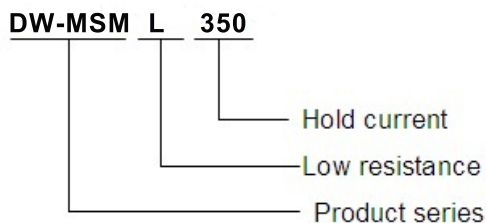
$R_{1max}$ =Maximum device resistance measured in the nontripped state 1 hour post reflow.

## Marking System

### Part 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	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

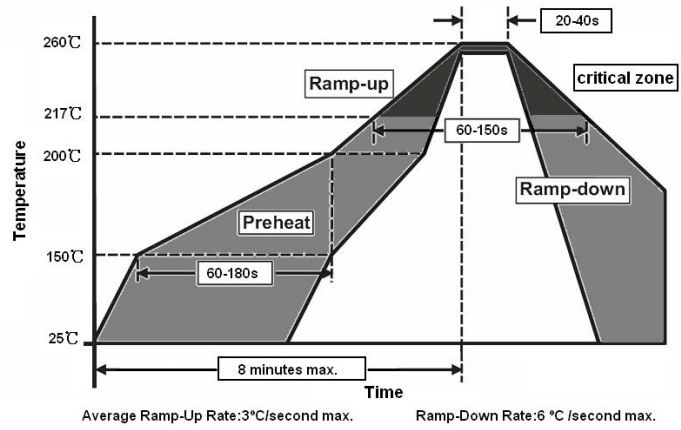
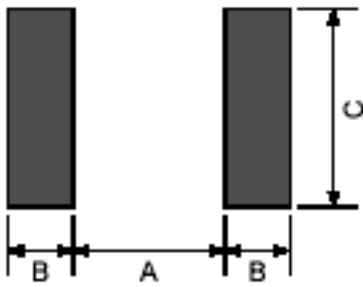
## Packaging and Marking Information

Size 4532mm/1812 mils

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.)		
				mm	In.	mm	In.	mm	In.	
DW-MSM010	2000	1812A	W010	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM014	2000	1812A	W014	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM020	2000	1812A	W020	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM050	2000	1812A	W050	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM050/24	2000	1812A	W050	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	TUV
DW-MSM075	2000	1812A	W075	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM075/24	2000	1812A	W075	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM110	2000	1812A	W110	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM110/8	2000	1812A	W110	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM110/16	2000	1812A	W110	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM110/24	2000	1812A	W110	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM125	2000	1812A	W125	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM125/8	2000	1812A	W125	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM125/16	2000	1812A	W125	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA

Part number	Tape & Reel Quantity	Tape spc code	Part Marking	Recommended Pad Layout Figures[mm(In.)]						Agency Recognition
				Dimension		Dimension		Dimension		
				A(Nom.)		B(Nom.)		C(Nom.)		
DW-MSM125/24	2000	1812A	W125	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM150	2000	1812A	W150	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM150/8	2000	1812A	W150	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM150/16	1000	1812B	W150	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM150/24	1000	1812B	W150	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM160	2000	1812A	W160	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM160/8	2000	1812A	W160	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM160/16	1000	1812B	W160	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM175/8	2000	1812A	W175	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM175/16	1000	1812B	W175	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML190	2000	1812A	W190	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML190/12	2000	1812A	W190	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM200	2000	1812A	W200	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM200/8	2000	1812A	W200	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM200/16	1000	1812B	W200	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML250	2000	1812A	W250	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML250/12	2000	1812A	W250	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM260	1000	1812B	W260	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSM260/8	1000	1812B	W260	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSM260/16	1000	1812B	W260	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML350	2000	1812A	W350	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML350/12	2000	1812A	W350	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML400	2000	1812A	W400	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML400/12	2000	1812A	W400	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML450	2000	1812A	W450	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML450/12	2000	1812A	W450	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML500	2000	1812A	W500	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML500/12	2000	1812A	W500	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML550	2000	1812A	W550	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML550/12	2000	1812A	W550	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML600	2000	1812A	W600	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML600/12	2000	1812A	W600	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA
DW-MSML650	2000	1812A	W650	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML700	2000	1812A	W700	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML750	1000	1812B	W750	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML800	1000	1813B	W800	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML850	1000	1814B	W850	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV
DW-MSML900	1000	1815B	W900	3.45	(0.141)	1.78	(0.071)	3.15	(0.121)	UL,CSA,TUV

## Solder Pad Layouts



\* Recommended reflow methods: IR, Vapor phase

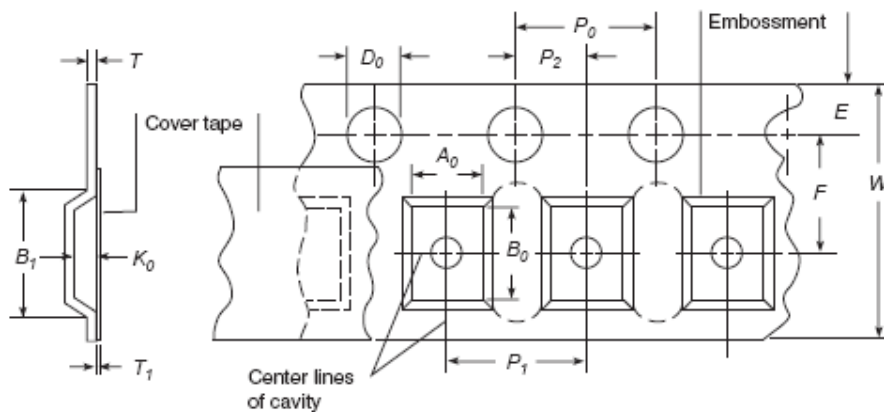
\* Devices can be cleaned using standard industry methods and solvents.

### Notes:

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

## Tape Specification And Reel Dimensions

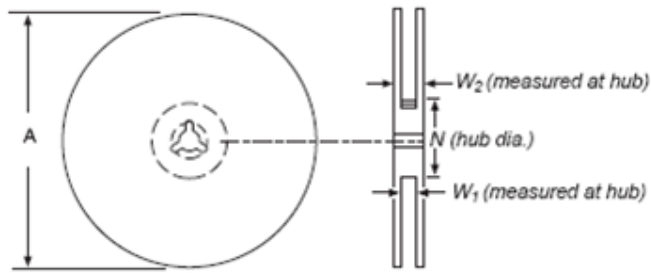
ape spc code	W	P0	P1	P2	A	B	D	F	E	T	K
1812(A)	12.0±0.30	4.00±0.10	8.00±0.10	2.00±0.05	3.55±0.10	4.90±0.10	1.55±0.05	5.50±0.10	1.75±0.10	0.25±0.05	0.80±0.10
1812(B)	12.0±0.30	4.00±0.10	8.00±0.10	2.00±0.05	3.55±0.10	4.90±0.10	1.55±0.05	5.50±0.10	1.75±0.10	0.25±0.05	1.25±0.10



## Reel Dimensions

Tape spc code	A	N	W1	W2
1812(A)	180+0/-1.5	60+1/-0	13.0+1/-0	15.4+1/-0
1812(B)	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.