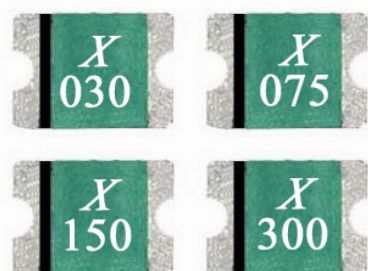


Resettable PPTC Fuse



Features

- Broadest range of surface mount devices available in the industry
- Faster time to trip than standard surface mount devices
- RoHS Compliant & Halogen Free

Agency Approval and Environmental Compliance

Agency	File Number	Regulation
UL, C-UL	E211981	
TÜV	In Process	

XMD2920 Series

Surface Mount Devices

Electrical Characteristics

Part Number	I_H	I_T	T_{Trip}	I_{MAX}	V_{MAX}	$P_{D Typ}$	R_{MIN}	$R1_{MAX}$
	A	A	sec/A	A	V	W	Ω	Ω
XMD2920-030	0.30	0.60	3.0/1.5	100	60	1.5	1.000	4.800
XMD2920-050	0.50	1.00	4.0/2.5	100	60	1.5	0.300	1.400
XMD2920-075	0.75	1.50	0.3/8.0	40	33	1.5	0.180	1.000
XMD2920-100	1.10	2.20	0.5/8.0	40	33	1.5	0.090	0.410
XMD2920-125	1.25	2.50	2.0/8.0	40	33	1.5	0.050	0.250
XMD2920-150	1.50	3.00	2.0/8.0	40	33	1.5	0.050	0.230
XMD2920-185	1.85	3.70	2.5/8.0	40	33	1.5	0.040	0.150
XMD2920-200	2.00	4.00	4.5/8.0	100	16	1.5	0.035	0.120
XMD2920-250	2.50	5.00	16.0/8.0	100	16	1.5	0.025	0.085
XMD2920-260	2.60	5.20	20.0/8.0	100	6	1.5	0.020	0.075
XMD2920-300	3.00	5.20	25.0/8.0	100	6	1.5	0.010	0.048

I_H =Hold current-maximum current at which the device will not trip at 23°C still air.

I_T =Trip current-minimum current at which the device will always trip at 23°C still air.

T_{Trip} =Maximum time to trip(s) at assigned current.

I_{MAX} = Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).

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

$P_{D Typ}$ =Typical power dissipated from device when in tripped state in 23°C still air environment.

R_{MIN} =Minimum device resistance at 23°C.

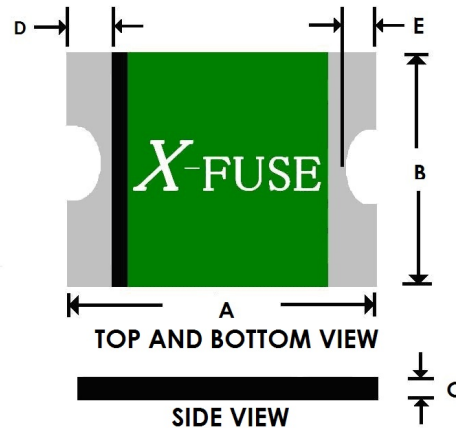
$R1_{MAX}$ =Maximum device resistance at 23°C, 1 hour after tripping .

Resettable PPTC Fuse



Product Dimensions (Millimeter)

Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
XMD2920-030	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
XMD2920-050	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
XMD2920-075	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
XMD2920-100	6.73	7.98	4.80	5.44	0.40	1.00	0.50	1.20	0.50	0.90
XMD2920-125	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
XMD2920-150	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
XMD2920-185	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
XMD2920-200	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
XMD2920-250	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
XMD2920-260	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
XMD2920-300	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90



Thermal Derating Chart-I_H (A)

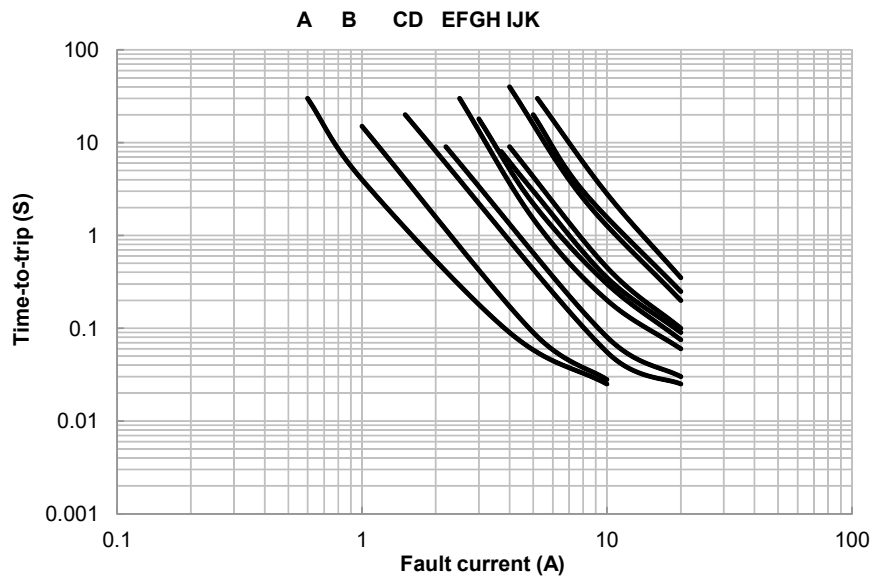
Part Number	Maximum ambient operating Temperature(°C)									
	-40	-20	0	23	30	40	50	60	70	85
XMD2920-030	0.47	0.40	0.35	0.30	0.28	0.25	0.23	0.20	0.17	0.14
XMD2920-050	0.79	0.67	0.59	0.50	0.46	0.42	0.38	0.33	0.29	0.23
XMD2920-075	1.18	1.01	0.88	0.75	0.69	0.62	0.56	0.50	0.44	0.34
XMD2920-100	1.57	1.34	1.17	1.00	0.92	0.83	0.75	0.66	0.58	0.45
XMD2920-125	1.81	1.68	1.46	1.25	1.15	1.04	0.94	0.83	0.73	0.56
XMD2920-150	2.18	2.01	1.76	1.50	1.38	1.25	1.13	0.99	0.87	0.68
XMD2920-185	2.68	2.48	2.16	1.85	1.70	1.54	1.39	1.22	1.07	0.83
XMD2920-200	2.90	2.68	2.34	2.00	1.84	1.66	1.50	1.32	1.16	0.90
XMD2920-250	3.63	3.35	2.93	2.50	2.30	2.08	1.88	1.65	1.45	1.13
XMD2920-260	3.77	3.48	3.04	2.60	2.39	2.16	1.95	1.72	1.51	1.17
XMD2920-300	4.35	4.02	3.51	3.00	2.76	2.49	2.25	1.98	1.74	1.35

Resettable PPTC Fuse

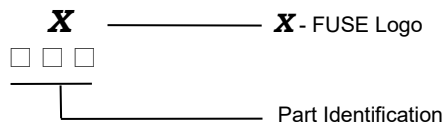
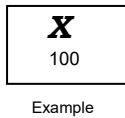


Typical Time-To-Trip at 23 °C

- A = XMD2920-030
- B = XMD2920-050
- C = XMD2920-075
- D = XMD2920-100
- E = XMD2920-125
- F = XMD2920-150
- G = XMD2920-185
- H = XMD2920-200
- I = XMD2920-250
- J = XMD2920-260
- K = XMD2920-300



Marking System



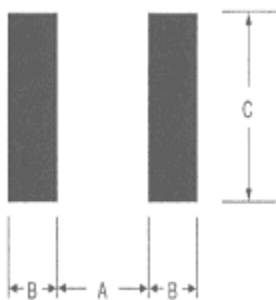
Package Information

Tape & Reel:

XMD2920-030~XMD2920-300 -----2000pcs per reel

Pad Layouts

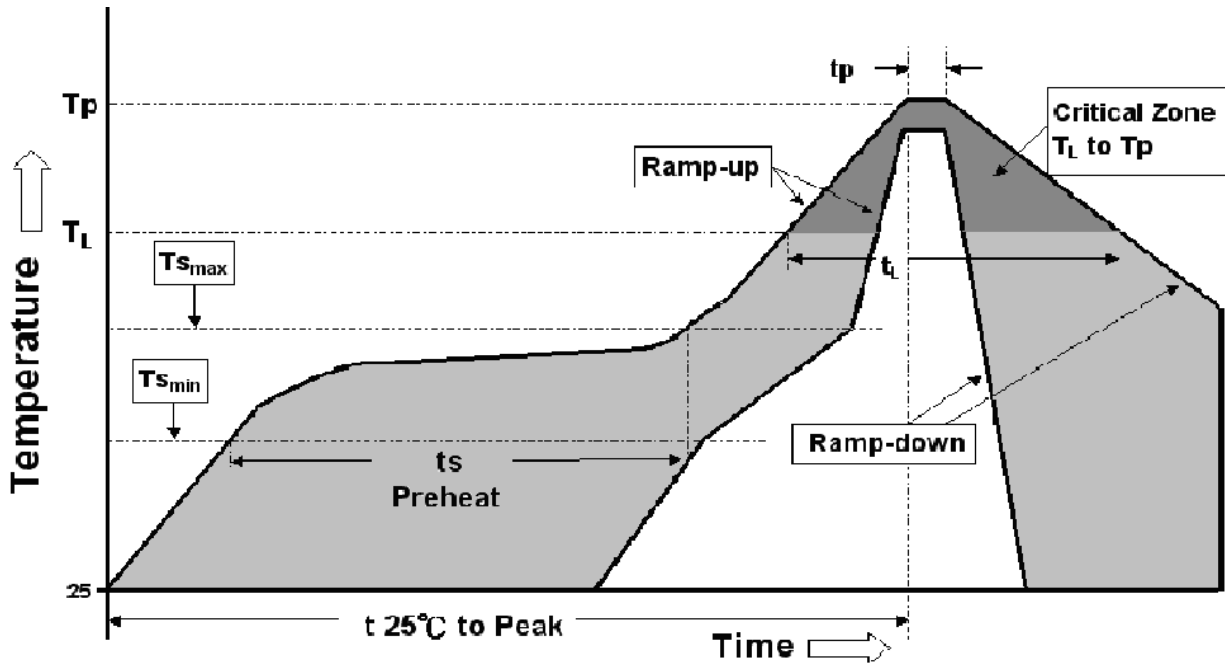
The dimension in the table below provide the recommended pad layout for each XMD2920 device



Pad dimensions (millimeters)			
Device	A Nominal	B Nominal	C Nominal
XMD2920 Series	5.10	2.30	5.60

Resettable PPTC Fuse

Soldering Parameters



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T_{smax} to T_p)	3 °C/second max.
Preheat :	
-Temperature Min (T _{smin})	150 °C
-Temperature Max (T _{smax})	200 °C
-Time (t _{smin} to t _{smax})	60-180 seconds
Time maintained above:	
-Temperature(T _L)	217 °C
-Time (t _L)	60-150 seconds
Peak/Classification Temperature(T_p)	260 °C
Time within 5°C of actual Peak :	
Temperature (t _p)	20-40 seconds
Ramp-Down Rate :	6 °C/second max.
Time 25 °C to Peak Temperature :	8 minutes max.

- Recommended solder paste thickness > 0.25mm.
- Devices cleansing applies standard methods and aqueous solution.
- Use standard industry practices for rework.
- Storage condition : < 30°C / 60%RH

Note 1: All temperatures refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Note 3: Devices are not designed to be wave soldered to the bottom side of the board.

Caution : Operation beyond the specified maximum ratings or misuse can result in damage and possible electrical arcing and/or flame.

PPTC device are designed for occasional overcurrent protection. Not for continuously overcurrent circumstance and/or prolonged trip are not anticipated.

Keep PPTC device away from chemical solvent contact. Prolonged contact will damage the device performance.