

PTC Resettable Fuse Semi-Circular Termination

MPTS-R Series

MERITEK

FEATURE

- Operation Current: 0.01A ~ 5.0A
- Maximum Voltage: 6V ~ 60V
- Temperature Range: -40°C to 85°C
- Excellent for high density applications
- Faster time to trip than standard SMD devices
- Solid state, Surface mountable: 0603, 0805, 1206, 1210, 1812, 2920
- UL/cUL safety approved: certification No: E223037
- TUV safety approved: certification No: R50223766



PART NUMBERING SYSTEM

MPTS 2920L 300 24 R
(1) (2) (3) (4) (5)



No	item	Digit	Description	Series Reference
(1)	Meritek Series	MPTS	Polymer Resettable Fuse Series	Surface Mount Type
(2)	Size Code	2920L	2920L: 2920 inch	0805L: 0805 inch, 1210L: 1210 inch
(3)	Current Rating	300	300: 3.0A	100: 1.0A, 075: 75mA
(4)	Voltage Rating	24	24: 24VDC	16: 16VDC
(5)	Termination Type	R	Semi-Circular Termination Type	Blank: Straight Termination Type

ELECTRICAL CHARACTERISTICS AT 23°C

Item	Value	Characteristics
Hold Current	3.0A	I_H =Hold current-maximum current at which the device will not trip at 23°C still air.
Trip Current	5.2A	I_T =Trip current-minimum current at which the device will always trip at 23°C still air.
Rated Voltage	24V _{DC}	V_{MAX} =Maximum voltage device can withstand without damage at its rated current (I_{MAX}).
Max Current	100A	I_{MAX} = Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).
Typical Power	1.5W	P_d =Typical power dissipated-type amount of power dissipated by the device when in the tripped state in 23°C still air environment.
T _{MAX} to Trip	20.0Sec.	Device response time, at current of 8.0A
Resistance	R _{MIN}	0.010Ω R_{MIN} =Minimum device resistance at 23°C prior to tripping.
	R1 _{MAX}	0.048Ω $R1_{MAX}$ =Maximum device resistance at 23°C measured 1 hour after tripping or reflow soldering of 260°C for 20 seconds.

Termination pad materials: Pure Tin

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ELECTRICAL CHARACTERISTICS AT 23°C

MPTS0603

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	Current	Time	R_{MIN}	$R1_{MAX}$
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	A	Sec	Ω	Ω
MPTS0603L001R	0.01	0.03	60	40	0.5	0.20	1.00	20.00	150.00
MPTS0603L002R	0.02	0.06	60	40	0.5	0.20	1.00	12.00	60.00
MPTS0603L003R	0.03	0.09	30	40	0.5	0.20	1.00	3.50	28.00
MPTS0603L004R	0.04	0.12	24	40	0.5	0.20	1.00	4.00	40.00
MPTS0603L005R	0.05	0.15	15	40	0.5	0.50	0.10	3.80	30.00
MPTS0603L010R	0.10	0.25	15	40	0.5	0.70	0.10	0.90	8.00
MPTS0603L012R	0.12	0.30	9	40	0.5	0.80	0.10	1.10	5.80
MPTS0603L016R	0.16	0.40	9	40	0.5	1.00	0.10	1.00	4.20
MPTS0603L020R	0.20	0.45	9	40	0.5	2.00	0.10	0.55	3.50

MPTS0805

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	Current	Time	R_{MIN}	$R1_{MAX}$
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	Amp	Sec	Ω	Ω
MPTS0805L010R	0.10	0.30	15	100	0.5	0.50	1.50	0.700	6.000
MPTS0805L010-24R	0.10	0.30	24	100	0.5	0.50	1.50	0.700	6.000
MPTS0805L020R	0.20	0.50	9	100	0.5	8.00	0.02	0.400	3.500
MPTS0805L035R	0.35	0.75	6	100	0.5	8.00	0.10	0.250	1.200
MPTS0805L050R	0.50	1.00	6	100	0.5	8.00	0.10	0.150	0.850
MPTS0805L050-9R	0.50	1.00	9	100	0.5	8.00	0.10	0.150	0.850
MPTS0805L075R	0.75	1.50	6	100	0.6	8.00	0.20	0.090	0.350
MPTS0805L100R	1.00	1.95	6	100	0.6	8.00	0.30	0.060	0.210
MPTS0805L110R	1.10	2.20	6	100	0.6	8.00	0.20	0.050	0.170

MPTS1206

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	Current	Time	R_{MIN}	$R1_{MAX}$
	I_H , A	I_T , A	V_{MAX} , V _{DC}	I_{MAX} , A	P_d , W	Amp	Sec	Ω	Ω
MPTS1206L005R	0.05	0.15	60	100	0.4	0.25	1.50	3.600	50.00
MPTS1206L010R	0.10	0.25	60	100	0.4	0.50	1.00	1.600	15.00
MPTS1206L012R	0.12	0.39	48	100	0.6	1.00	0.20	1.400	6.50
MPTS1206L016R	0.16	0.45	48	100	0.6	1.00	0.30	1.100	5.00
MPTS1206L020R	0.20	0.40	30	100	0.4	8.00	0.10	0.600	2.50
MPTS1206L025R	0.25	0.50	16	100	0.6	8.00	0.08	0.550	2.30
MPTS1206L025-24R	0.25	0.50	24	100	0.6	8.00	0.08	0.550	2.30
MPTS1206L035R	0.35	0.75	16	100	0.4	8.00	0.10	0.300	1.20
MPTS1206L035-30R	0.35	0.75	30	100	0.6	8.00	0.10	0.300	1.20
MPTS1206L050R	0.50	1.00	8	100	0.4	8.00	0.10	0.150	0.70
MPTS1206L050-24R	0.50	1.00	24	100	0.6	8.00	0.10	0.150	0.75
MPTS1206L075R	0.75	1.50	8	100	0.6	8.00	0.20	0.090	0.29
MPTS1206L075-16R	0.75	1.50	16	100	0.6	8.00	0.20	0.090	0.29
MPTS1206L100R	1.00	1.80	6	100	0.6	8.00	0.30	0.055	0.21
MPTS1206L110R	1.10	2.20	8	100	0.8	8.00	0.30	0.040	0.18

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ELECTRICAL CHARACTERISTICS AT 23°C (CONTINUED)

MPTS1206 (Continued)

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
						Amp	Sec	Ω	Ω
MPTS1206L110-16R	1.10	2.20	16	100	0.8	8.00	0.30	0.040	0.18
MPTS1206L150R	1.50	3.00	8	100	0.8	8.00	1.00	0.040	0.12
MPTS1206L200R	2.00	3.50	6	100	0.8	8.00	1.50	0.018	0.08

MPTS1210

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
						Amp	Sec	Ω	Ω
MPTS1210L005R	0.05	0.15	60	100	0.60	0.25	1.50	3.600	50.00
MPTS1210L010R	0.10	0.25	60	100	0.60	0.50	1.50	1.600	15.00
MPTS1210L020R	0.20	0.40	30	100	0.60	8.00	0.02	0.800	5.00
MPTS1210L035R	0.35	0.70	16	100	0.60	8.00	0.20	0.320	1.30
MPTS1210L050R	0.50	1.00	16	100	0.60	8.00	0.10	0.250	0.90
MPTS1210L075R	0.75	1.50	8	100	0.60	8.00	0.10	0.130	0.40
MPTS1210L075-24R	0.75	1.50	24	100	0.60	8.00	0.10	0.130	0.40
MPTS1210L110R	1.10	2.20	8	100	0.80	8.00	0.30	0.060	0.21
MPTS1210L110-16R	1.10	2.20	16	100	0.80	8.00	0.30	0.060	0.21
MPTS1210L150R	1.50	3.00	6	100	0.80	8.00	0.50	0.040	0.11
MPTS1210L175R	1.75	4.00	6	100	0.80	8.00	0.60	0.020	0.08
MPTS1210L200R	2.00	4.00	6	100	0.80	8.00	1.00	0.015	0.07

MPTS2016

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
						Amp	Sec	Ω	Ω
MPTS2016L030R	0.30	0.60	60	100	1.4	1.5	3.0	0.500	2.300
MPTS2016L050R	0.55	1.10	60	100	1.4	2.5	5.0	0.450	1.000
MPTS2016L075R	0.75	1.50	60	100	1.4	8.0	0.5	0.130	0.900
MPTS2016L100R	1.10	2.20	15	100	1.4	8.0	0.5	0.100	0.400
MPTS2016L100-33R	1.10	2.20	33	100	1.4	8.0	0.5	0.100	0.400
MPTS2016L150R	1.50	3.00	15	100	1.4	8.0	0.8	0.070	0.180
MPTS2016L200R	2.00	4.20	6	100	1.4	8.0	3.0	0.048	0.100

MPTS2920

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
						A	Sec	Ω	Ω
MPTS2920L030R	0.30	0.60	60	100	1.5	1.5	3.0	1.000	4.800
MPTS2920L050R	0.50	1.00	60	100	1.5	2.5	4.0	0.300	1.400
MPTS2920L075R	0.75	1.50	33	100	1.5	8.0	0.3	0.180	1.000
MPTS2920L075-60R	0.75	1.5	60	100	1.5	8.0	0.3	0.180	1.000
MPTS2920L100R	1.10	2.20	33	100	1.5	8.0	0.5	0.090	0.410
MPTS2920L100-60R	1.00	2.00	60	100	1.5	8.0	0.5	0.090	0.410

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ELECTRICAL CHARACTERISTICS AT 23°C (CONTINUED)

MPTS2920 (Continued)

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Amp	Sec	Ω	Ω
MPTS2920L125R	1.25	2.50	33	100	1.5	8.0	2.0	0.050	0.250
MPTS2920L150R	1.50	3.00	33	100	1.5	8.0	2.0	0.050	0.230
MPTS2920L185R	1.85	3.70	33	100	1.5	8.0	2.5	0.040	0.150
MPTS2920L200R	2.00	4.00	16	100	1.5	8.0	4.5	0.035	0.120
MPTS2920L200-24R	2.00	4.00	24	100	1.5	8.0	5.0	0.035	0.120
MPTS2920L250R	2.50	5.00	16	100	1.5	8.0	16.0	0.025	0.085
MPTS2920L260R	2.60	5.20	6	100	1.5	8.0	20.0	0.020	0.075
MPTS2920L260-24R	2.60	5.20	24	100	1.5	8.0	20.0	0.020	0.075
MPTS2920L300R	3.00	5.20	6	100	1.5	8.0	25.0	0.010	0.048
MPTS2920L300-15R	3.00	5.20	15	100	1.5	8.0	20.0	0.010	0.048
MPTS2920L300-24R	3.00	5.20	24	100	1.5	8.0	20.0	0.010	0.048
MPTS2920L400-16R	4.00	8.00	16	100	1.5	4.0	20.0	0.010	0.040
MPTS2920L500-16R	5.00	10.00	16	100	1.5	5.0	20.0	0.005	0.025

MPTS1812

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
	I_H , A	I_T , A	V_{MAX} , Vdc	I_{MAX} , A	Pd, W	Amp	Sec	Ω	Ω
MPTS1812L010R	0.10	0.300	60	100	0.8	8.0	0.02	1.60	15.00
MPTS1812L014R	0.14	0.300	60	100	0.8	8.0	0.01	1.20	6.50
MPTS1812L020R	0.20	0.400	30	100	0.8	8.0	0.02	0.80	5.00
MPTS1812L020-60R	0.20	0.400	60	100	0.8	8.0	0.02	0.80	5.00
MPTS1812L030R	0.30	0.600	30	100	0.8	8.0	0.10	0.20	1.75
MPTS1812L035R	0.35	0.700	16	100	0.8	8.0	0.10	0.32	1.50
MPTS1812L035-30R	0.35	0.700	30	100	0.8	8.0	0.10	0.32	1.50
MPTS1812L050R	0.50	1.000	16	100	0.8	8.0	0.15	0.15	1.00
MPTS1812L050-30R	0.50	1.000	30	100	0.8	8.0	0.15	0.15	1.00
MPTS1812L075R	0.75	1.500	16	100	0.8	8.0	0.20	0.11	0.45
MPTS1812L075-24R	0.75	1.500	24	100	1.0	8.0	0.20	0.11	0.29
MPTS1812L075-33R	0.75	1.500	33	100	1.0	8.0	0.20	0.11	0.40
MPTS1812L110R	1.10	2.200	8	100	0.8	8.0	0.30	0.04	0.21
MPTS1812L110-16R	1.10	2.200	16	100	0.8	8.0	0.50	0.06	0.18
MPTS1812L110-24R	1.10	2.200	24	100	1.0	8.0	0.50	0.06	0.20
MPTS1812L110-33R	1.10	2.200	33	100	0.8	8.0	0.50	0.06	0.20
MPTS1812L125R	1.25	2.500	6	100	0.8	8.0	0.40	0.05	0.14
MPTS1812L125-16R	1.25	2.500	16	100	0.8	8.0	0.40	0.05	0.14
MPTS1812L150R	1.50	3.000	8	100	0.8	8.0	0.50	0.04	0.11
MPTS1812L150-12R	1.50	3.000	12	100	1.0	8.0	0.50	0.04	0.11
MPTS1812L150-24R	1.50	3.000	24	100	1.0	8.0	1.50	0.04	0.12
MPTS1812L160R	1.60	3.200	8	100	0.8	8.0	0.50	0.03	0.10
MPTS1812L160-12R	1.60	3.200	12	100	1.0	8.0	1.00	0.03	0.10
MPTS1812L160-16R	1.60	3.200	16	100	1.0	8.0	1.00	0.03	0.10
MPTS1812L200R	2.00	3.500	8	100	1.0	8.0	2.00	0.02	0.07

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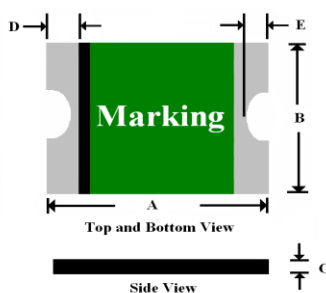
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ELECTRICAL CHARACTERISTICS AT 23°C (CONTINUED)

MPTS1812 (Continued)

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
	I_H, A	I_T, A	V_{MAX}, Vdc	I_{MAX}, A	Pd, W	Current	Time	R_{MIN}	$R1_{MAX}$
						Amp	Sec	Ω	Ω
MPTS1812L20016R	2.00	3.500	16	100	1.0	8.0	5.00	0.02	0.09
MPTS1812L260R	2.60	5.000	8	100	1.0	8.0	2.50	0.02	0.05
MPTS1812L260-13R	2.60	5.000	13.2	100	1.3	8.0	5.00	0.02	0.05
MPTS1812L260-16R	2.60	5.000	16	100	1.3	8.0	5.00	0.02	0.05
MPTS1812L300R	3.00	5.000	6	100	1.0	8.0	4.00	0.01	0.04

DIMENSIONS



MPTS0603

Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS0603L001R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L002R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L003R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L004R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L005R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L010R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L012R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L016R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
MPTS0603L020R	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40

MPTS0805

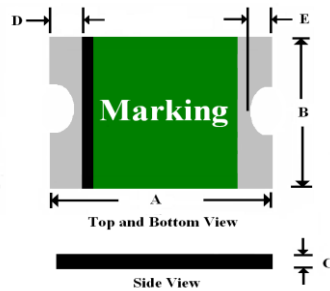
Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS0805L010R	2.00	2.30	1.20	1.50	0.55	1.00	0.20	0.60	0.10	0.45
MPTS0805L010-24R	2.00	2.30	1.20	1.50	0.30	1.00	0.20	0.60	0.10	0.45
MPTS0805L020R	2.00	2.30	1.20	1.50	0.55	1.00	0.20	0.60	0.10	0.45
MPTS0805L035R	2.00	2.30	1.20	1.50	0.45	0.75	0.20	0.60	0.10	0.45
MPTS0805L050R	2.00	2.30	1.20	1.50	0.55	1.25	0.20	0.60	0.10	0.45
MPTS0805L050-9R	2.00	2.30	1.20	1.50	0.55	1.25	0.20	0.60	0.10	0.45
MPTS0805L075R	2.00	2.30	1.20	1.50	0.55	1.25	0.20	0.60	0.10	0.45
MPTS0805L100R	2.00	2.30	1.20	1.50	0.75	1.80	0.20	0.60	0.10	0.45
MPTS0805L110R	2.00	2.30	1.20	1.50	0.75	1.80	0.20	0.60	0.10	0.45

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DIMENSIONS (CONTINUED)



MPTS1206

Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS1206L005R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
MPTS1206L010R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
MPTS1206L012R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
MPTS1206L016R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
MPTS1206L020R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
MPTS1206L025R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
MPTS1206L025-24R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
MPTS1206L035R	3.00	3.50	1.50	1.80	0.30	0.75	0.10	0.75	0.10	0.45
MPTS1206L035-30R	3.00	3.50	1.50	1.80	0.90	1.30	0.25	0.75	0.10	0.45
MPTS1206L050R	3.00	3.50	1.50	1.80	0.25	0.55	0.10	0.75	0.10	0.45
MPTS1206L050-24R	3.00	3.50	1.50	1.80	0.80	1.20	0.25	0.75	0.10	0.45
MPTS1206L075R	3.00	3.50	1.50	1.80	0.45	1.25	0.25	0.75	0.10	0.45
MPTS1206L075-16R	3.00	3.50	1.50	1.80	0.45	1.25	0.25	0.75	0.10	0.45
MPTS1206L100R	3.00	3.50	1.50	1.80	0.45	1.00	0.25	0.75	0.10	0.45
MPTS1206L110R	3.00	3.50	1.50	1.80	0.45	1.00	0.25	0.75	0.10	0.45
MPTS1206L110-16R	3.00	3.50	1.50	1.80	0.80	1.40	0.25	0.75	0.10	0.45
MPTS1206L150R	3.00	3.50	1.50	1.80	0.80	1.40	0.25	0.75	0.10	0.45
MPTS1206L200R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45

MPTS1210

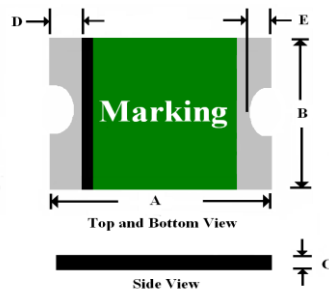
Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS1210L005R	3.00	3.43	2.35	2.80	0.60	1.15	0.25	0.75	0.10	0.45
MPTS1210L010R	3.00	3.43	2.35	2.80	0.60	1.15	0.25	0.75	0.10	0.45
MPTS1210L020R	3.00	3.43	2.35	2.80	0.40	0.85	0.25	0.75	0.10	0.45
MPTS1210L035R	3.00	3.43	2.35	2.80	0.40	0.80	0.25	0.75	0.10	0.45
MPTS1210L050R	3.00	3.43	2.35	2.80	0.30	0.75	0.25	0.75	0.10	0.45
MPTS1210L075R	3.00	3.43	2.35	2.80	0.30	0.70	0.25	0.75	0.10	0.45
MPTS1210L075-24R	3.00	3.43	2.35	2.80	0.80	1.20	0.25	0.75	0.10	0.45
MPTS1210L110R	3.00	3.43	2.35	2.80	0.60	1.00	0.25	0.75	0.10	0.45
MPTS1210L110-16R	3.00	3.43	2.35	2.80	0.60	1.00	0.25	0.75	0.10	0.45
MPTS1210L150R	3.00	3.43	2.35	2.80	0.50	0.90	0.25	0.75	0.10	0.45
MPTS1210L175R	3.00	3.43	2.35	2.80	0.80	1.40	0.25	0.75	0.10	0.45
MPTS1210L200R	3.00	3.43	2.35	2.80	0.80	1.40	0.25	0.75	0.10	0.45

PTC Resettable Fuse Semi-Circular Termination

MPTS-R Series

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DIMENSIONS (CONTINUED)



MPTS1812

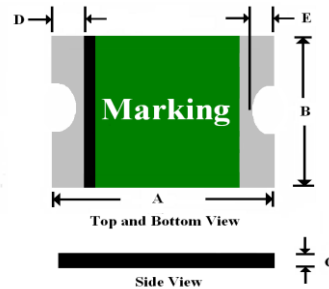
Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS1812L010R	4.37	4.73	3.07	3.41	0.60	0.90	0.30	0.95	0.25	0.65
MPTS1812L014R	4.37	4.73	3.07	3.41	0.60	0.90	0.30	0.95	0.25	0.65
MPTS1812L020R	4.37	4.73	3.07	3.41	0.60	0.90	0.30	0.95	0.25	0.65
MPTS1812L020-60R	4.37	4.73	3.07	3.41	0.60	0.90	0.30	0.95	0.25	0.65
MPTS1812L030R	4.37	4.73	3.07	3.41	0.40	0.70	0.30	0.95	0.25	0.65
MPTS1812L035R	4.37	4.73	3.07	3.41	0.40	0.70	0.30	0.95	0.25	0.65
MPTS1812L035-30R	4.37	4.73	3.07	3.41	0.35	0.65	0.30	0.95	0.25	0.65
MPTS1812L050R	4.37	4.73	3.07	3.41	0.45	0.75	0.30	0.95	0.25	0.65
MPTS1812L050-30R	4.37	4.73	3.07	3.41	0.35	0.65	0.30	0.95	0.25	0.65
MPTS1812L075R	4.37	4.73	3.07	3.41	0.80	1.55	0.25	0.95	0.25	0.65
MPTS1812L075-24R	4.37	4.73	3.07	3.41	0.80	1.55	0.25	0.95	0.25	0.65
MPTS1812L075-33R	4.37	4.73	3.07	3.41	0.25	0.55	0.30	0.95	0.25	0.65
MPTS1812L110R	4.37	4.73	3.07	3.41	0.25	0.90	0.30	0.95	0.25	0.65
MPTS1812L110-16R	4.37	4.73	3.07	3.41	0.80	1.30	0.25	0.95	0.25	0.65
MPTS1812L110-24R	4.37	4.73	3.07	3.41	0.80	1.30	0.25	0.95	0.25	0.65
MPTS1812L110-33R	4.37	4.73	3.07	3.41	0.25	0.55	0.30	0.95	0.25	0.65
MPTS1812L125R	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.95	0.25	0.65
MPTS1812L125-16R	4.37	4.73	3.07	3.41	0.25	0.55	0.30	0.95	0.25	0.65
MPTS1812L150R	4.37	4.73	3.07	3.41	0.60	1.10	0.25	0.95	0.25	0.65
MPTS1812L150-12R	4.37	4.73	3.07	3.41	0.60	1.55	0.25	0.95	0.25	0.65
MPTS1812L150-24R	4.37	4.73	3.07	3.41	0.25	0.90	0.30	0.95	0.25	0.65
MPTS1812L160R	4.37	4.73	3.07	3.41	0.60	1.35	0.25	0.95	0.25	0.65
MPTS1812L160-12R	4.37	4.73	3.07	3.41	0.60	1.35	0.25	0.95	0.25	0.65
MPTS1812L160-16R	4.37	4.73	3.07	3.41	0.55	1.20	0.25	0.95	0.25	0.65
MPTS1812L200R	4.37	4.73	3.07	3.41	0.60	1.55	0.25	0.95	0.25	0.65
MPTS1812L20016R	4.37	4.73	3.07	3.41	0.55	1.20	0.25	0.95	0.25	0.65
MPTS1812L260R	4.37	4.73	3.07	3.41	0.80	1.55	0.25	0.95	0.25	0.65
MPTS1812L260-13R	4.37	4.73	3.07	3.41	0.80	1.55	0.25	0.95	0.25	0.65
MPTS1812L260-16R	4.37	4.73	3.07	3.41	0.80	1.55	0.25	0.95	0.25	0.65
MPTS1812L300R	4.37	4.73	3.07	3.41	0.60	0.90	0.30	0.95	0.25	0.65

PTC Resettable Fuse Semi-Circular Termination

MPTS-R Series

MERITEK

DIMENSIONS (CONTINUED)



MPTS2016

Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS2016L030R	4.72	5.44	3.70	4.43	0.40	1.15	0.30	1.50	0.25	0.65
MPTS2016L050R	4.72	5.44	3.70	4.43	0.40	1.70	0.30	1.50	0.25	0.65
MPTS2016L075R	4.72	5.44	3.70	4.43	0.40	1.70	0.30	1.50	0.25	0.65
MPTS2016L100R	4.72	5.44	3.70	4.43	0.30	0.70	0.30	1.50	0.25	0.65
MPTS2016L100-33R	4.72	5.44	3.70	4.43	0.30	0.70	0.30	1.50	0.25	0.65
MPTS2016L150R	4.72	5.44	3.70	4.43	0.25	0.65	0.30	1.50	0.25	0.65
MPTS2016L200R	4.72	5.44	3.70	4.43	0.25	0.55	0.30	1.50	0.25	0.65

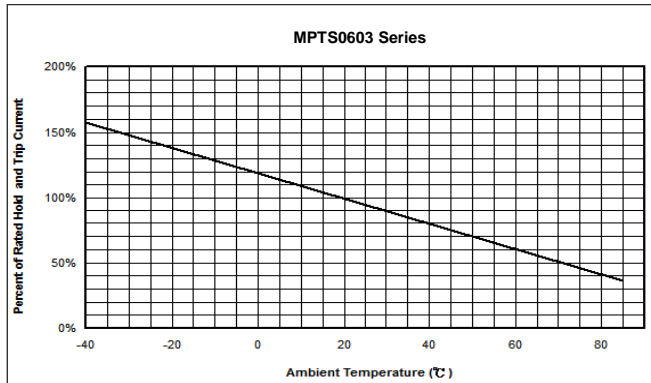
MPTS2920

Part Number	A (mm)		B (mm)		C (mm)		D (mm)		E (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPTS2920L030R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
MPTS2920L050R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
MPTS2920L075R	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
MPTS2920L075-60R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
MPTS2920L100R	6.73	7.98	4.80	5.44	0.40	1.00	0.50	1.20	0.50	0.90
MPTS2920L100-60R	6.73	7.98	4.80	5.44	0.40	1.70	0.50	1.20	0.50	0.90
MPTS2920L125R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
MPTS2920L150R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
MPTS2920L185R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
MPTS2920L200R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
MPTS2920L200-24R	6.73	7.98	4.80	5.44	0.20	0.80	0.50	1.20	0.50	0.90
MPTS2920L250R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
MPTS2920L260R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
MPTS2920L260-24R	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90
MPTS2920L300R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
MPTS2920L300-15R	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
MPTS2920L300-24R	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90
MPTS2920L400-16R	6.73	7.98	4.80	5.44	0.40	1.50	0.50	1.20	0.50	0.90
MPTS2920L500-16R	6.73	7.98	4.80	5.44	0.40	1.50	0.50	1.20	0.50	0.90

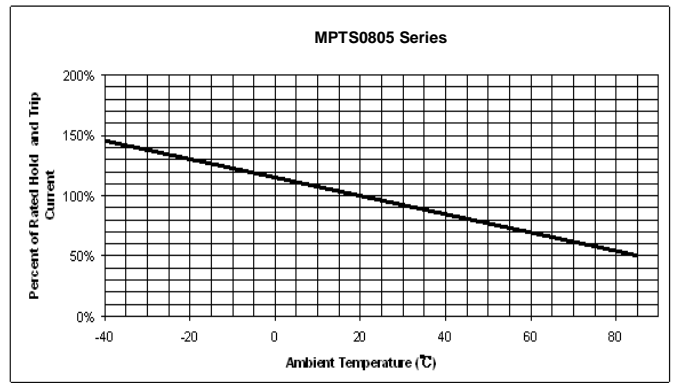
PTC Resettable Fuse Semi-Circular Termination

THERMAL DERATING CURVE

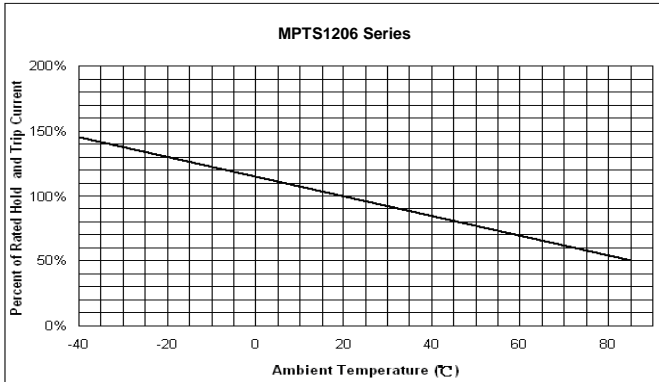
MPTS0603 Series



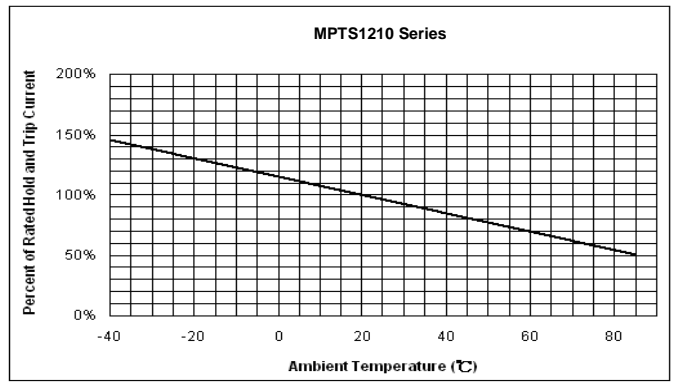
MPTS0805 Series



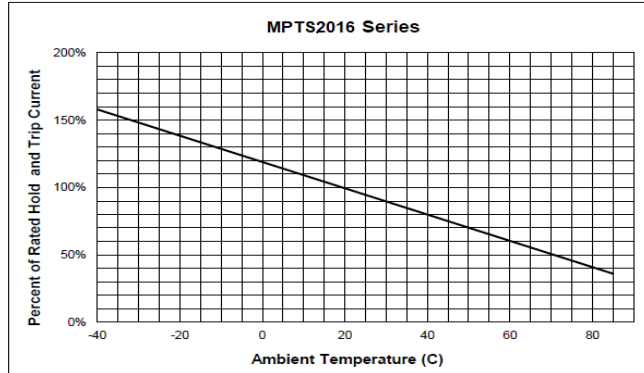
MPTS1206 Series



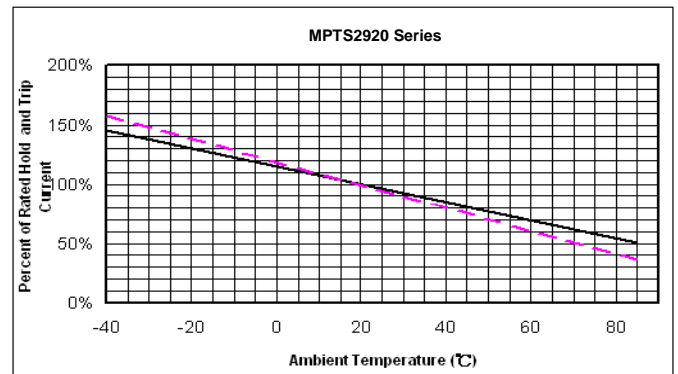
MPTS1210 Series



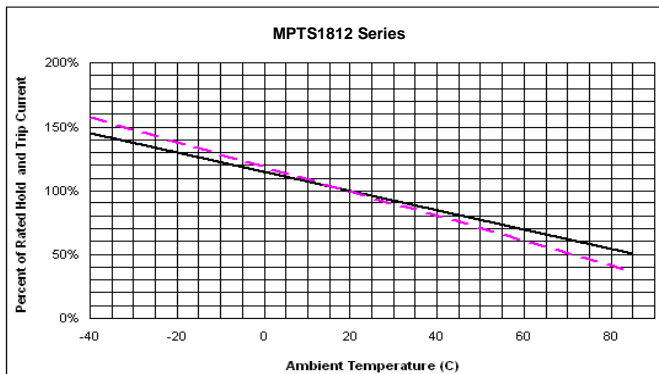
MPTS2016 Series



MPTS2920 Series



MPTS1812 Series



MPTS2920L010R~
MPTS2920L100R

MPTS2920L125R~
MPTS2920L300R

MPTS1812L010R~
MPTS1812L050R

MPTS1812L075R~
MPTS1812L300R

PTC Resettable Fuse Semi-Circular Termination

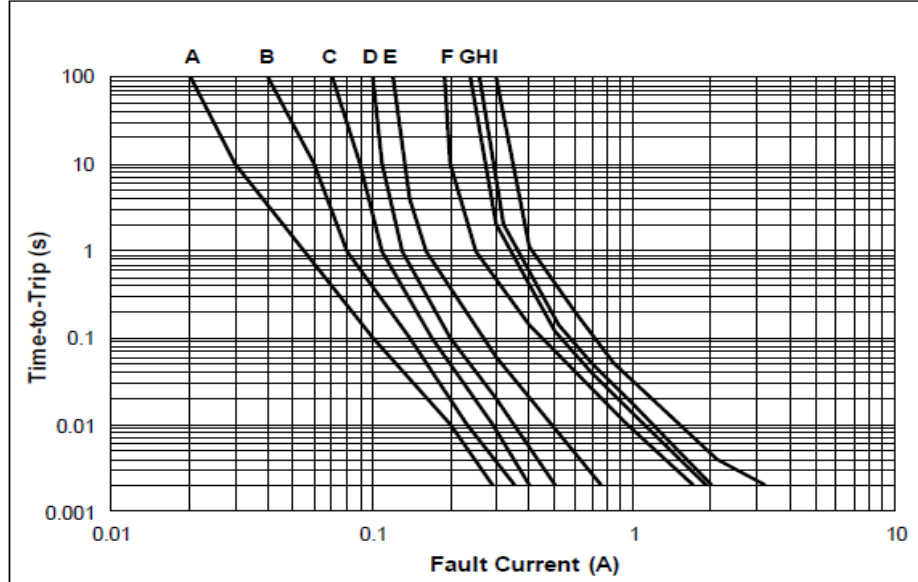
MPTS-R Series

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TYPICAL TIME-TO-TRIP AT 23°C

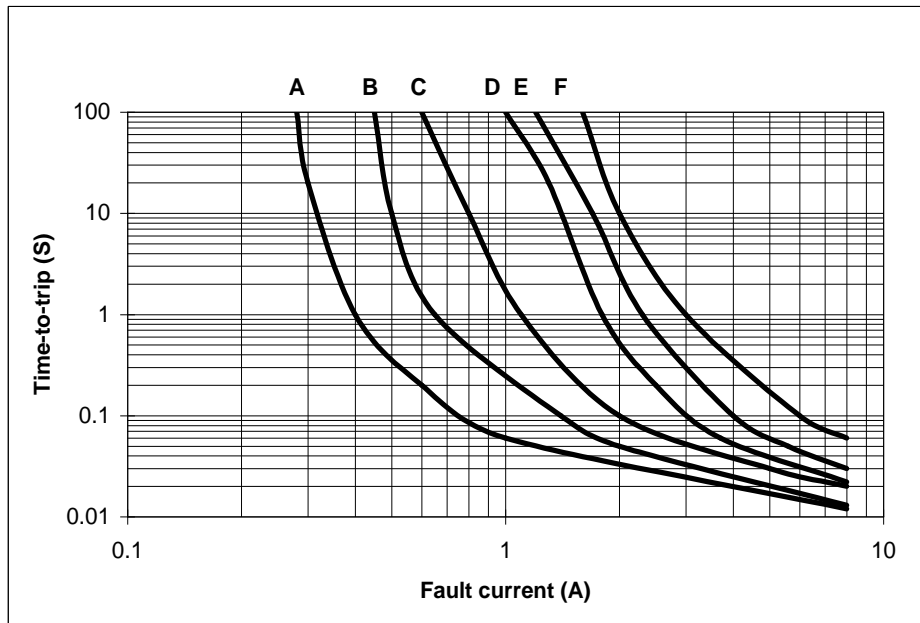
MPTS0603 Series

- A = MPTS0603L001R
- B = MPTS0603L002R
- C = MPTS0603L003R
- D = MPTS0603L004R
- E = MPTS0603L005R
- F = MPTS0603L010R
- G = MPTS0603L012R
- H = MPTS0603L016R
- I = MPTS0603L020R



MPTS0805 Series

- A = MPTS0805L010R
MPTS0805L010-24R
- B = MPTS0805L020R
- C = MPTS0805L035R
- D = MPTS0805L050R
MPTS0805L050-9R
- E = MPTS0805L075R
- F = MPTS0805L100R



PTC Resettable Fuse Semi-Circular Termination

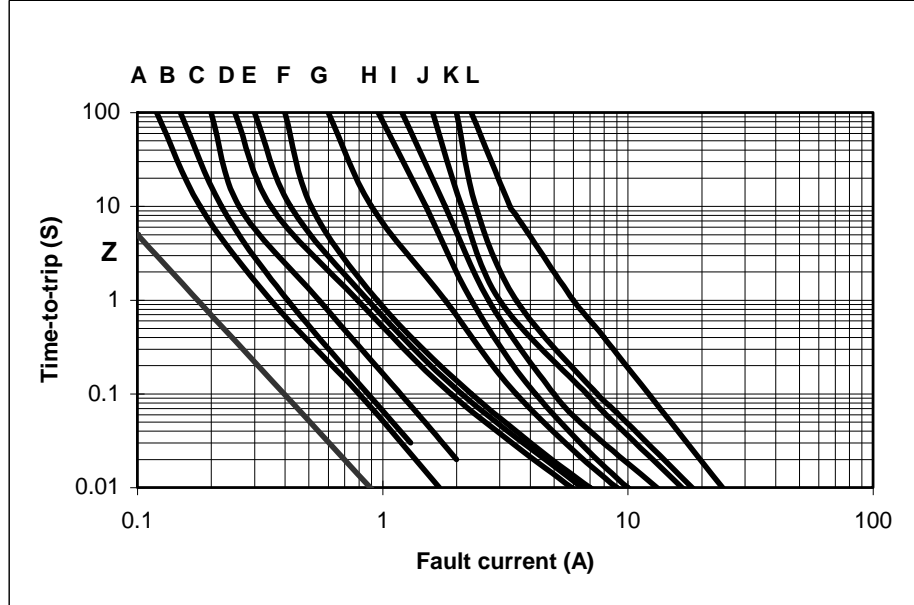
MPTS-R Series

MERITEK

TYPICAL TIME-TO-TRIP AT 23°C (CONTINUED)

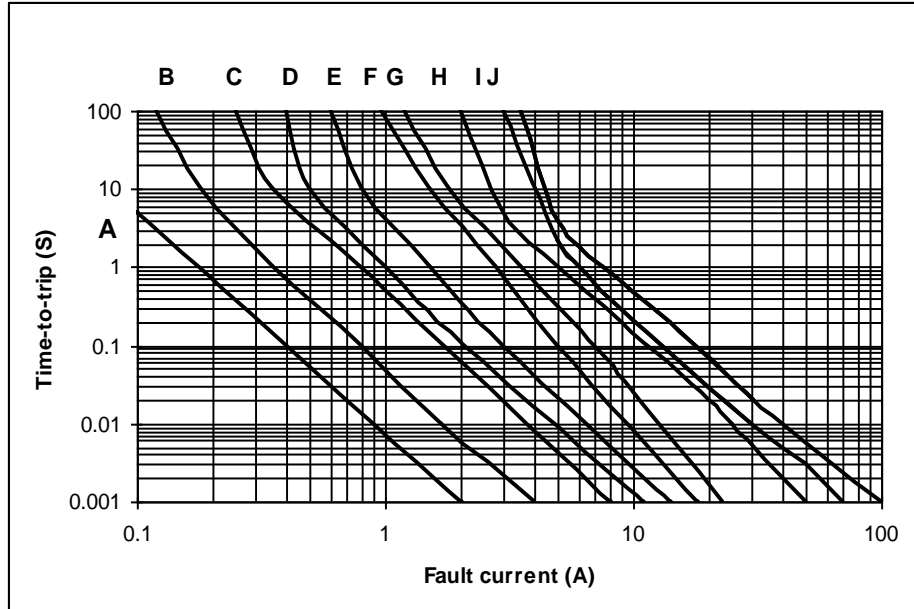
MPTS1206 Series

- Z = MPTS1206L005R
- A = MPTS1206L010R
- B = MPTS1206L012R
- C = MPTS1206L016R
- D = MPTS1206L020R
- E = MPTS1206L025R
- MPTS1206L025-24R
- F = MPTS1206L035R
- MPTS1206L035-30R
- G = MPTS1206L050R
- MPTS1206L050-24R
- H = MPTS1206L075R
- MPTS1206L075-16R
- I = MPTS1206L100R
- J = MPTS1206L110R
- MPTS1206L110-16R
- K = MPTS1206L150R
- L = MPTS1206L200R



MPTS1210 Series

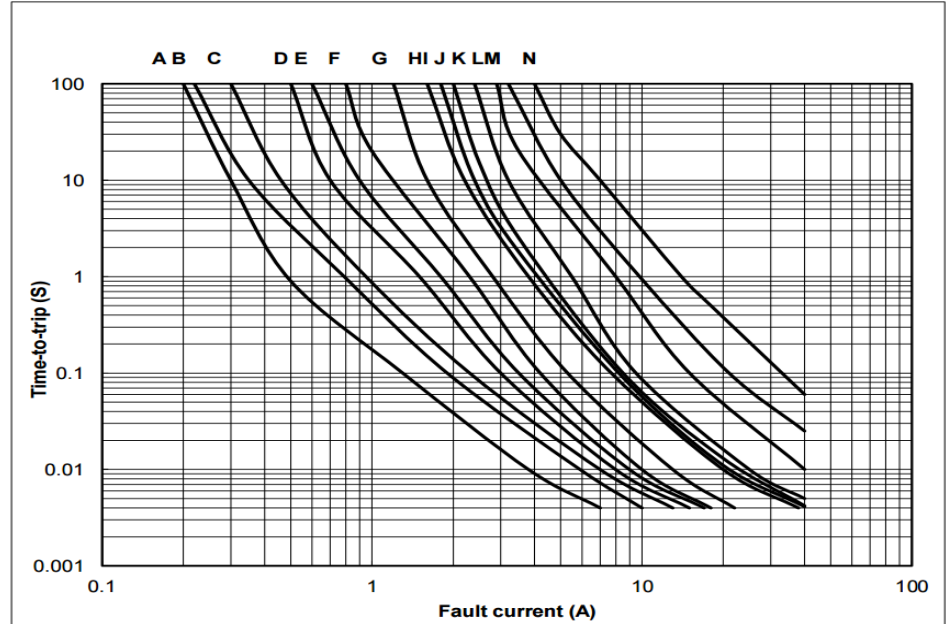
- A = MPTS1210L005R
- B = MPTS1210L010R
- C = MPTS1210L020R
- D = MPTS1210L035R
- E = MPTS1210L050R
- F = MPTS1210L075R
- MPTS1210L075-24R
- G = MPTS1210L110R
- MPTS1210L110-16R
- H = MPTS1210L150R
- I = MPTS1210L175R
- J = MPTS1210L200R



TYPICAL TIME-TO-TRIP AT 23°C (CONTINUED)

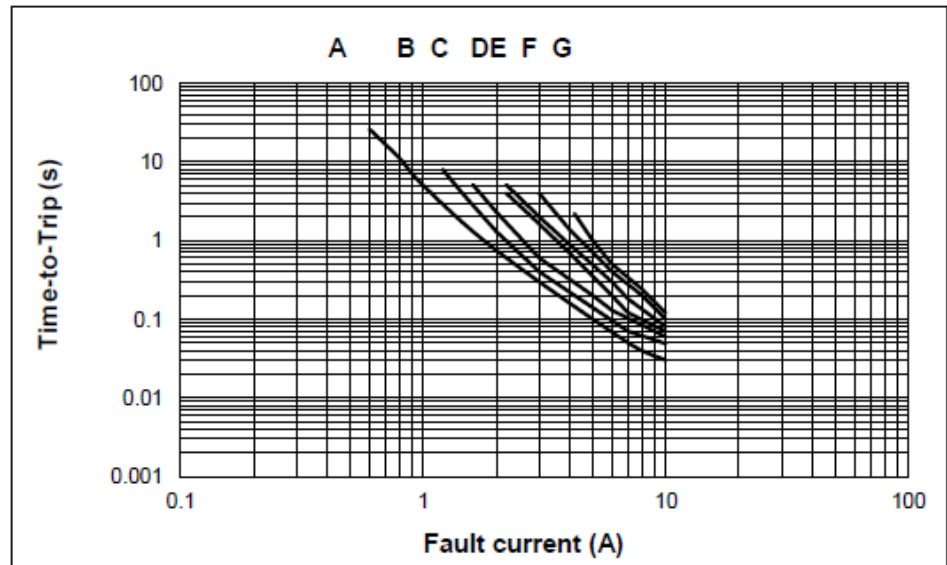
MPTS1812 Series

- A = MPTS1812L010R
- B = MPTS1812L014R
- C = MPTS1812L020R
MPTS1812L020-60R
- D = MPTS1812L030R
- E = MPTS1812L035R
MPTS1812L035-30R
- F = MPTS1812L050R
MPTS1812L050-30R
- G = MPTS1812L075R
MPTS1812L075-24R
MPTS1812L075-33R
- H = MPTS1812L110R
MPTS1812L110-16R
MPTS1812L110-24R
MPTS1812L110-33R
- I = MPTS1812L125R
MPTS1812L125-16R
- J = MPTS1812L150R
MPTS1812L150-12R
MPTS1812L150-24R
- K = MPTS1812L160R
MPTS1812L160-12R
MPTS1812L160-16R
- L = MPTS1812L200R
MPTS1812L200-16R
- M = MPTS1812L260R
MPTS1812L260-13R
MPTS1812L260-16R
- N = MPTS1812L300R



MPTS2016 Series

- A = MPTS2016L030R
- B = MPTS2016L050R
- C = MPTS2016L075R
- D = MPTS2016L100R
- E = MPTS2016L100-33R
- F = MPTS2016L150R
- G = MPTS2016L200R



PTC Resettable Fuse Semi-Circular Termination

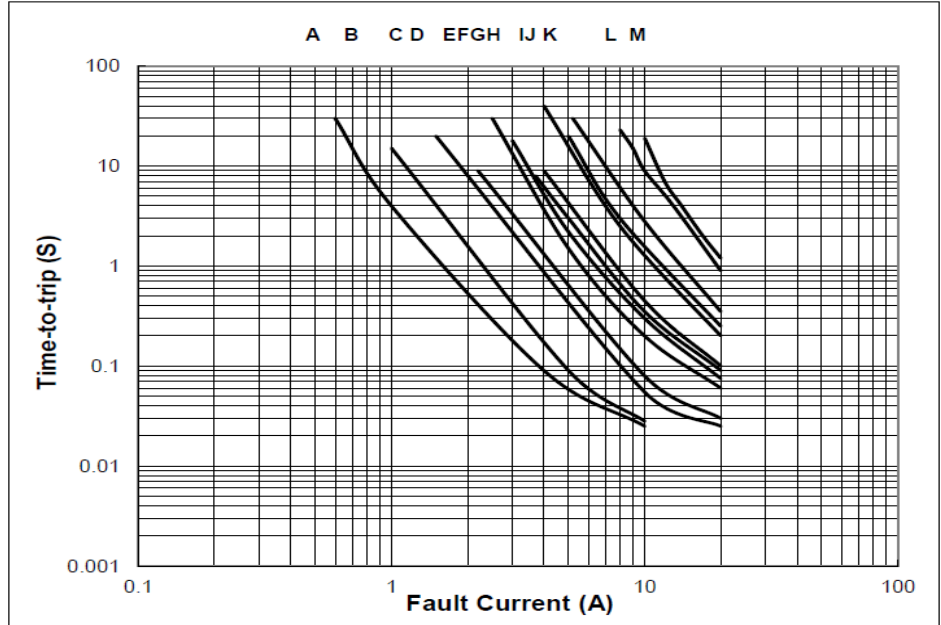
MPTS-R Series

MERITEK

TYPICAL TIME-TO-TRIP AT 23°C (CONTINUED)

MPTS2920 Series

- A = MPTS2920L030R
- B = MPTS2920L050R
- C = MPTS2920L075R
MPTS2920L075-60R
- D = MPTS2920L100R
MPTS2920L100-60R
- E = MPTS2920L125R
- F = MPTS2920L150R
- G = MPTS2920L185R
- H = MPTS2920L200R
MPTS2920L200-24R
- I = MPTS2920L250R
- J = MPTS2920L260R
MPTS2920L260-24R
- K = MPTS2920L300R
MPTS2920L300-15R
MPTS2920L300-24R
- L = MPTS2920L400-16R
- M = MPTS2920L500-16R



SOLDERING PAD SPECIFICATION

Unit: mm

Size	A Nominal	B Nominal	C Nominal
0603	0.80	0.60	0.80
0805	1.20	1.00	1.50
1206	2.00	1.00	1.90
1210	2.00	1.00	2.80
1812	3.45	1.78	3.50
2920	5.10	2.30	5.60



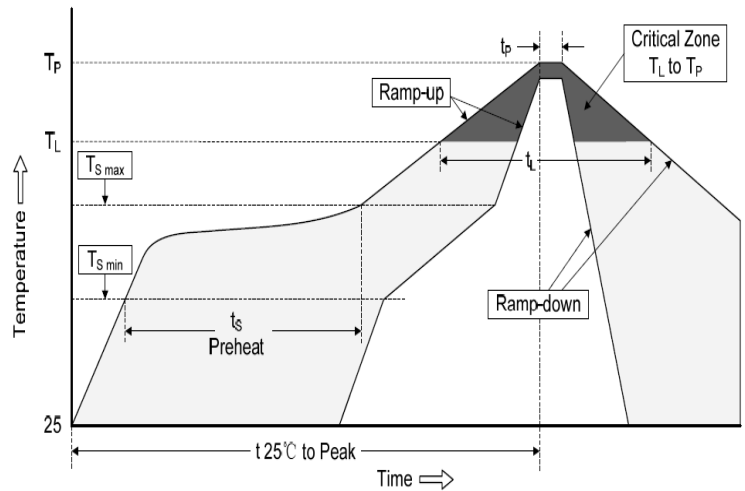
PTC Resettable Fuse Semi-Circular Termination

MPTS-R Series

MERITEK

RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	Temp. Min $T_{s(min)}$	150°C
	Tempe. Max $T_{s(max)}$	200°C
	Time (min. to max.) (t_s)	60-180 seconds
Average ramp up rate (Temperature) (T_A) to peak		3°C/second max.
$T_{s(max)}$ to T_A (Ramp-up rate)		3°C/second max.
Reflow	Temp. (T_A)	217°C
	Time (min. to max.) (t_s)	60-150 seconds
Peak Temperature (T_P)		260 ^{+/-0.5} °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 Temp. (T_P)		8 minutes max.



REWORK RECOMENDATIONS

Solder reflow

- Recommended max past thickness > 0.25mm.
- Devices can be cleaned using standard methods and aqueous solvent.
- Rework should utilize standard industry practices. These changes should apply to all notes for each case size.
- Storage Environment : < 30°C / 60%RH

Caution:

- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.
- Devices are not designed to be wave soldered to the bottom side of the board.

WARNING

- Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip is not anticipated.
- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance

NOTE: Specification subject to change without notice.