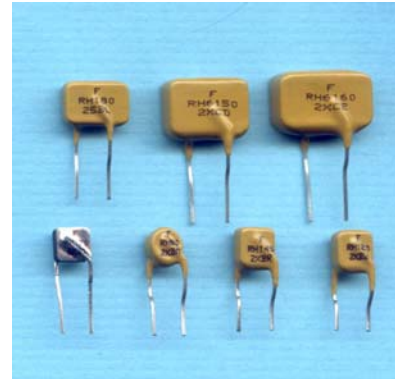




FEATURES

- RoHS Compliant (Lead Free) Product
- Telecommunications and wide variety of electronic applications
- Radial leaded product for up to 60V/250V/600V
- Operation Current : 80mA~180mA
- Maximum Operation Voltage : 60V
- Maximum Interrupt Voltage : 250V/600V
- Temperature Range : -40°C to 85°C



PART NUMBERING SYSTEM

			MPTH	250V	080	V
Meritek Series						
Voltage rating						
Current rating						
blank	U	V				
standard	uncoating	High voltage				

Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max. Time To Trip		Maximum Current	Max Oper. Voltage	Max Int. Voltage	Typical Power	Resistance Tolerance	
			Current	Time					R _{MIN}	R _{1MAX}
			I _H , A	I _T , A					A	Sec
MPTH250V080U	0.08	0.16	0.35	4.0	3.0	60	250	1.0	14.0	33.0
MPTH250V080	0.08	0.16	0.35	4.0	3.0	60	250	1.0	14.0	33.0
MPTH250V110U	0.11	0.22	1.00	2.0	3.0	60	250	1.0	5.0	16.0
MPTH250V110	0.11	0.22	1.00	2.0	3.0	60	250	1.0	5.0	16.0
MPTH250V120U	0.12	0.24	1.00	2.0	3.0	60	250	1.0	6.0	16.0
MPTH250V120	0.12	0.24	1.00	2.0	3.0	60	250	1.0	4.0	16.0
MPTH250V145U	0.15	0.29	1.00	2.5	3.0	60	250	1.0	3.5	12.0
MPTH250V145	0.15	0.29	1.00	2.5	3.0	60	250	1.0	3.0	12.0
MPTH250V180U	0.18	0.65	1.50	10.0	10.0	60	250	1.5	0.8	4.0
MPTH250V180	0.18	0.65	1.50	11.0	10.0	60	250	1.5	0.8	4.0
MPTH600V150	0.15	0.30	1.00	5.0	3.0	60	600	1.6	6.0	22.0
MPTH600V160	0.16	0.32	1.00	7.0	3.0	60	600	1.6	4.0	18.0

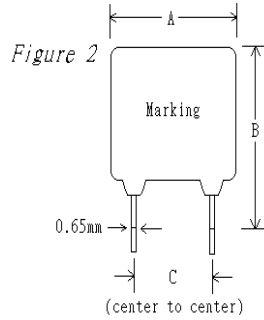
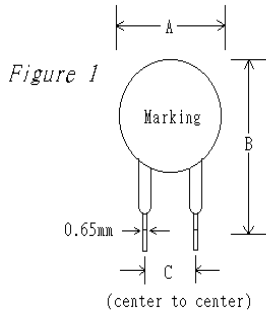
Lead material: MPTH250V080F ~ MPTH250V180F Tin plated copper, 22 AWG.
MPTH600V150 ~ MPTH600V160 Tin plated copper, 22 AWG.

NOTE : All MPTH250/600V products are designed to assist equipment to pass ITU, UL1950 or GR1089 specification

CAUTION : MPTH250/600V devices are not intended for continuous use of Line Voltage such as 120 VAC ~ 600VAC and above.

NOTE : Specification subject to change without notice.

Production Dimensions (millimeter)



Lead Size :22AWG,
Φ 0.65 mm Diameter

Lead Size : 22AWG,
Φ 0.65 mm Diameter

Part Number	Fig	A	B	C	D	E
		Maximum	Maximum	Typical	Minimum	Maximum
MPTH250V080U	1	5.1	9.1	5.0	4.7	3.8
MPTH250V080	1	5.8	9.6	5.0	4.7	4.6
MPTH250V110U	1	5.9	9.4	5.0	4.7	3.8
MPTH250V110	1	6.8	9.9	5.0	4.7	4.6
MPTH250V120U	2	6.0	10.0	5.0	4.7	3.8
MPTH250V120	2	6.5	11.0	5.0	4.7	4.6
MPTH250V145U	2	6.0	10.0	5.0	4.7	3.8
MPTH250V145	2	6.5	11.0	5.0	4.7	4.6
MPTH250V180U	2	10.4	12.6	5.0	4.7	3.8
MPTH250V180	2	10.9	12.6	5.0	4.7	4.6
MPTH600V150	2	14.0	12.6	5.0	4.7	6.0
MPTH600V160	2	16.0	12.6	5.0	4.7	6.0



Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max. Time To Trip		Maximum Current	Max Oper. Voltage	Max Int. Voltage	Typical Power	Resistance	
			Current	Time					R _{MIN}	R _{1MAX}
			I _H , A	I _T , A					A	Sec
MPTH250V080UV	0.08	0.16	0.35	4.0	3.0	100	250	1.0	14.0	33.0
MPTH250V080V	0.08	0.16	0.35	4.0	3.0	100	250	1.0	14.0	33.0
MPTH250V110UV	0.11	0.22	1.00	2.0	3.0	100	250	1.0	5.0	16.0
MPTH250V110V	0.11	0.22	1.00	2.0	3.0	100	250	1.0	5.0	16.0
MPTH250V120UV	0.12	0.24	1.00	2.0	3.0	100	250	1.0	6.0	16.0
MPTH250V120V	0.12	0.24	1.00	2.0	3.0	100	250	1.0	4.0	16.0
MPTH250V145UV	0.15	0.29	1.00	2.5	3.0	100	250	1.0	3.5	12.0
MPTH250V145V	0.15	0.29	1.00	2.5	3.0	100	250	1.0	3.0	12.0
MPTH250V180UV	0.18	0.65	1.50	10.0	10.0	100	250	1.5	0.8	4.0
MPTH250V180V	0.18	0.65	1.50	11.0	10.0	100	250	1.5	0.8	4.0
MPTH250V180XV	0.18	0.65	3.00	2.0	10.0	100	250	1.5	0.8	4.0
MPTH600V150V	0.15	0.30	1.00	5.0	3.0	250	600	1.0	6.0	22.0
MPTH600V150M	0.15	0.30	1.00	4.0	3.0	250	600	1.0	6.0	17.0
MPTH600V160V	0.16	0.32	1.00	7.0	3.0	250	600	1.0	4.0	18.0

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

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

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

V_{I-MAX} = Maximum interrupt voltage device can withstand for short period of time. (Not for long term.)

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

P_d=Typical power dissipated from device when in the tripped state in 23°C still air environment.

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

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

Physical specifications:

Lead material: MPTH250V080V ~ MPTH250V180V Tin plated copper,22 AWG.

MPTH600V150V ~ MPTH600V160V Tin plated copper,22 AWG.

Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy ,meet UL-94V-0 requirement.

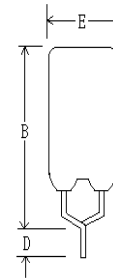
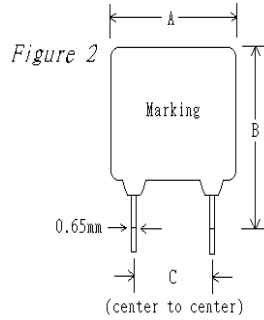
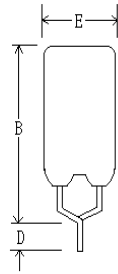
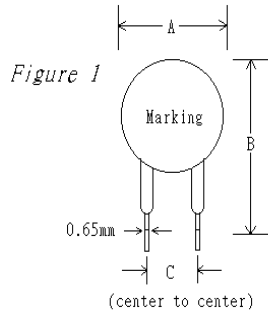
NOTE : MPTH600V160V, MPTH600V150V and MPTH600V150M have been tested to meet the requirements of the Overvoltage Test and Endurance Conditioning Test per Standard UL497A.

All MPTH250/600V products are designed to assist equipment to pass ITU, UL1950 or GR1089 specification.

CAUTION : MPTH250/600V devices are not intended for continuous use of Line Voltage such as 120 VAC ~ 600VAC and above.



Production Dimensions (millimeter)



Lead Size :22AWG,
Φ 0.65 mm Diameter

Lead Size : 22AWG,
Φ 0.65 mm Diameter

Part Number	Fig	A	B	C	D	E
		Maximum	Maximum	Typical	Minimum	Maximum
MPTH250V080UV	1	5.1	9.1	5.0	4.7	3.8
MPTH250V080V	1	5.8	9.6	5.0	4.7	4.6
MPTH250V110UV	1	5.9	9.4	5.0	4.7	3.8
MPTH250V110V	1	6.8	9.9	5.0	4.7	4.6
MPTH250V120UV	2	6.0	10.0	5.0	4.7	3.8
MPTH250V120V	2	6.5	11.0	5.0	4.7	4.6
MPTH250V145UV	2	6.0	10.0	5.0	4.7	3.8
MPTH250V145V	2	6.5	11.0	5.0	4.7	4.6
MPTH250V180UV	2	10.4	12.6	5.0	4.7	3.8
MPTH250V180V	2	10.9	12.6	5.0	4.7	4.6
MPTH250V180X	1	9.0	12.0	5.0	4.7	3.8
MPTH600V150V	2	14.0	12.6	5.0	4.7	6.0
MPTH600V150M	2	9.0	12.5	5.0	4.7	4.6
MPTH600V160V	2	16.0	12.6	5.0	4.7	6.0