# **PTC Resettable Fuse** Strap Type 1.9A to 7.3A

#### **FEATURE**

- Operation Current: 1.9A to 7.3A
- Maximum Operating Voltage: 15V and 20V
- Temperature Range: -40°C to 85°C
- Low profile, Solid state, Low resistance, High hold current
- Electronic applications: Rechargeable battery packs, Lithium cell, battery packs and laptop computer
- UL/cUL safety approved: certification No: E223037

### **PART NUMBERING SYSTEM**

<u>MPLR</u> 190 (2)

(1)

No	ltem	Digit	Description	Series Reference			
(1)	Meritek Series	MPLR	Polymer Resettable Fuse Series	Strap Type			
(2)	Current Rating	190	190: 1.9A	260: 2.6A			

## **ELECTRICAL CHARACTERISTICS AT 23°C**

ltem	Va	lue	Characteristics						
Hold Current	1.9A		$I_{H}$ =Hold current-maximum current at which the device will not trip at 23°C still air.						
Trip Current	3.9A		$I_T$ =Trip current-minimum current at which the device will always trip at 23°C still and						
Rated Voltage	15V <sub>DC</sub>		$V_{MAX}$ =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	1.2W		P <sub>d</sub> =Typical power dissipated-type amount of power dissipated by the device when in the tripped state in 23°C still air environment.						
T <sub>MAX</sub> to Trip	5.0Sec.		Device response time, at current of 5 X Hold Current: 9.5A.						
	R <sub>MIN</sub>	0.039 Ω	R <sub>MIN</sub> =Minimum device resistance at 23°C prior to tripping.						
Resistance	R <sub>MAX</sub>	0.072 Ω	R <sub>MAX</sub> =Maximum device resistance at 23°C prior to tripping.						
	R1 <sub>MAX</sub>	0.102 Ω	R1 <sub>MAX</sub> =Maximum device resistance at 23°C measured 1 hour after tripping or reflow soldering of 260°C for 20 seconds.						

\* Lead material: 0.13mm nominal thickness, quarter-hard nickel

\* Insulating material: Polyester tape.



**MERITEK** 



### **ELECTRICAL CHARACTERISTICS AT 23°C**

	Hold	Trip	Max. Time	Maximum	Rated	Typical	Resistance Tolerance		
Part Number	Current	Current	to Trip	Current	Voltage	Power	R <sub>MIN</sub>	R <sub>MAX</sub>	R1 <sub>MAX</sub>
i tulliool	I <sub>H</sub> , A	Ι <sub>Τ</sub> , Α	@5x I <sub>H</sub> , S	I <sub>MAX</sub> , A	$V_{MAX}, V_{DC}$	P <sub>d</sub> , W	ohms	ohms	ohms
MPLR190	1.9	3.9	5.0	100	15	1.2	0.039	0.072	0.102
MPLR260	2.6	5.8	5.0	100	15	2.5	0.020	0.042	0.063
MPLR380	3.8	8.3	5.0	100	15	2.5	0.013	0.026	0.037
MPLR450	4.5	8.9	5.0	100	20	2.5	0.011	0.020	0.028
MPLR550	5.5	10.5	5.0	100	20	2.8	0.009	0.016	0.022
MPLR660	6.0	11.7	5.0	100	20	2.8	0.007	0.014	0.019
MPLR730	7.3	14.1	5.0	100	20	3.3	0.006	0.012	0.015

#### DIMENSIONS



#### **Top View**

Part	A (mm)		B (mm)		C (mm)		D (mm)		F (mm)	
Number	Min	Max	Min	Мах	Min	Max	Min	Мах	Min	Max
MPLR190	19.9	22.1	4.9	5.5	0.6	1.0	5.5	7.5	3.9	4.1
MPLR260	20.9	23.1	4.9	5.5	0.6	1.0	4.1	5.5	3.9	4.1
MPLR380	24.0	26.0	6.9	7.5	0.6	1.0	4.1	5.5	4.9	5.1
MPLR450	24.0	26.0	9.9	10.5	0.6	1.0	5.3	6.7	5.9	6.1
MPLR550	35.0	37.0	6.9	7.5	0.6	1.0	5.3	6.7	4.9	5.1
MPLR660	24.0	26.0	13.9	14.5	0.6	1.0	4.1	5.5	5.9	6.1
MPLR730	27.1	29.1	13.9	14.5	0.6	1.0	4.1	5.5	5.9	6.1

### THERMAL DERATING CURVE



#### **TYPICAL TIME-TO-TRIP AT 23°C**



### 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.