

TE ESD Protectors and SMD Chip Fuses



Products may be RoHS compliant. Check mouser.com for RoHS status.

METAL HYBRID PPTC (MHP-TA) DEVICES WITH THERMAL ACTIVATION

- Low Current Contact rating: DC9V/12A (6000 cycles)
- High Current Contact rating: DC9V/25A (6000 cycles)
- Low Current Max. breaking current: DC5V/40A (100 cycles)
- High Current Max. breaking current: DC5V/80A (100 cycles)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Rating Normal	Operating Temp.		Reset Temp.		Ref. Resistance		Price Each			
				Min.	Max.	Min.	ΔT	Typ.	Max.	1	100	500	1000
Low Current													
650-MHP-TA6-9-72	MHP-TA6-9-72	A	72°C	67°C	77°C	≥40°C	≥7°C	10mΩ	15mΩ	1.10	.93	.80	.72
650-MHP-TA6-9-77	MHP-TA6-9-77	A	77°C	72°C	82°C	≥40°C	≥10°C	10mΩ	15mΩ	1.10	.93	.80	.72
650-MHP-TA6-9-82	MHP-TA6-9-82	A	82°C	77°C	87°C	≥40°C	≥10°C	10mΩ	15mΩ	1.15	.97	.83	.75
650-MHP-TA6-9-85	MHP-TA6-9-85	A	85°C	80°C	90°C	≥40°C	≥10°C	10mΩ	15mΩ	1.15	.97	.83	.75
High Current													
650-MHP-TA15-9-72	MHP-TA15-9-72	A	72°C	67°C	77°C	≥40°C	≥7°C	2.5mΩ	5.0mΩ	1.15	.97	.83	.75
650-MHP-TA15-9-77	MHP-TA15-9-77	A	77°C	72°C	82°C	≥40°C	≥10°C	2.5mΩ	5.0mΩ	1.15	.97	.83	.75
650-MHP-TA15-9-82	MHP-TA15-9-82	A	82°C	77°C	87°C	≥40°C	≥10°C	2.5mΩ	5.0mΩ	1.20	1.02	.87	.78
650-MHP-TA15-9-85	MHP-TA15-9-85	A	85°C	80°C	90°C	≥40°C	≥10°C	2.5mΩ	5.0mΩ	1.20	1.02	.87	.78
650-MHP-TA15-9-90	MHP-TA15-9-90	A	90°C	85°C	95°C	≥40°C	≥10°C	2.5mΩ	5.0mΩ	1.20	1.02	.87	.78

Resettable Fuses

METAL HYBRID PPTC (MHP) DEVICES

Features:

- 30A hold current
- Rated at 36VDC, 100A max.
- Low device resistance (< 2mOhm) compared to other breaker devices
- Able to withstand heavy vibration and impact
- Device allows easy mounting between 18650 cells



A (mm)		B (mm)		C (mm)		D (mm)		E (mm)		F (mm)	
min	max	min	max	min	max	min	max	min	max	min	max
25.8	26.2	9.2	9.6	5.1	5.5	32.8	33.6	6.8	7.2	0.9	1.1

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MOUSER STOCK NO.	TE Part No.	Fig.	Current Trip Limits I _{HOLD} @25°C	ITRIP @25°C	Operating Volt. V _{MAX}	100A@25°C	Time to Trip 60A@25°C	RTyp (mOhms)	Price Each			
									1	25	100	250
650-MHP30-36-T	MHP30-36-T	B	30A	50A	36VDC	4.5±1.5sec.	17±10sec.	16	6.05	4.58	4.00	3.66

TE Connectivity

REFLOWABLE THERMAL PROTECTION (RTP) DEVICE

Features:

- Opens at temperature below critical thermal threshold
- Compatible with up to 3 Pb-free solder reflow processes with peak temperatures up to 260°C
- Low series resistance
- DC interrupt voltage capable
- Robust design for harsh environment tested per stringent qualification specification
- RoHS compliant, lead and halogen free

Applications:

- Helps provide protection against thermal runaway for power FETs and other components if failure occurs in applications such as automotive HVAC, ABS, power steering, DC/DC converters, PTC heaters, etc. or IT servers, telecom power, converters, etc.
- Other DC thermal protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Rated Current	Volts (VDC)	Description	Functioning Temp.	Holding Temp.	Max. Temp.	Price Each			
									1	25	100	250
650-RTP140R060S-2	RTP140R060S-2	C	40A	250	Low temp 40°C to +105°C	23°±3°C	217°C	260°C	2.17	1.96	1.78	1.63
650-RTP140R060SD-2	RTP140R060SD-2	C	100A	32	Low temp 40°C to +105°C	23°±3°C	217°C	260°C	2.17	1.96	1.78	1.63
650-RTP200R060SA-2	RTP200R060SA-2	C	100A	32	Low resistance 55°C to +175°C	23°±3°C	217°C	260°C	2.43	2.01	1.96	1.63

SILICON ESD

The Silicon ESD (SESD) protection devices help protect electronic circuits against damage from electrostatic discharge (ESD) events

Features:

- Small size SESD protection diodes for high speed signals
- Halogen Free
- Low-breakdown voltage < 5.6V
- Capable of withstanding numerous ESD strikes
- Low capacitance and insertion loss
- 5V Working Reverse Voltage

Applications:

- USB 2.0/3.0, HDMI 1.3/1.4, and Displayport
- Mobile phones and portable electronics
- Low-voltage antenna ports
- Applications requiring high ESD performance in a small package



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Package Size	ESD Withstand		Breakdown Voltage (min) V _{br} @t = 1mA	Input Capacitance		Price Each		
				Contact	Air		Typ. (pF)	Max. (pF)	1	10	100
650-SESD0201X1BN0010	SESD0201X1BN-0010-098	D	0201	20kV	20kV	-9.8/-9.8	0.10	0.12	.37	.33	.30
650-SESD0201X1UN0020	SESD0201X1UN-0020-090	D	0201	20kV	20kV	+9.00/-0.80	0.20	0.22	.32	.28	.26
650-SESD0402X1BN0010	SESD0402X1BN-0010-098	D	0402	20kV	20kV	-9.8/-9.8	0.10	0.12	.35	.31	.28
650-SESD0402X1UN0020	SESD0402X1UN-0020-090	D	0402	20kV	20kV	+9.00/-0.80	0.20	0.22	.30	.26	.24
650-SESD0402Q2UG0020	SESD0402Q2UG-0020-090	D	0402	20kV	20kV	+9.00/-0.80	0.20	0.22	.50	.44	.40
650-SESD0802Q4UG0020	SESD0802Q4UG-0020-090	D	0802	20kV	20kV	+9.00/-0.80	0.20	0.22	.72	.64	.58
650-SESD1004Q4UG0020	SESD1004Q4UG-0020-090	D	1004	20kV	20kV	+9.00/-0.80	0.20	0.22	.70	.62	.56
650-SESD1103Q6UG0020	SESD1103Q6UG-0020-090	D	1103	20kV	20kV	+9.00/-0.80	0.20	0.22	1.09	.97	.87B

CHIP SESD

Features:

- Small size SESD protection diodes for high speed signals
- Low leakage current and input capacitance
- Halogen Free
- Capable of withstanding numerous ESD strikes
- 5V Working Reverse Voltage

Applications:

- USB 2.0 and computer I/O ports
- Mobile phones and portable electronics
- Digital cameras and camcorders
- Applications requiring high ESD performance in a small package

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Package Size	ESD Withstand		Breakdown Voltage (min) V _{br} @ t = 1mA	Input Capacitance		Price Each		
				Contact (kV)	Air (kV)		Typ. (pF)	Max. (pF)	1	10	100
650-SESD0201P1BN0400	SESD0201P1BN-0400-090	E	0201	±10	±16	9V	4.0	5.0	.32	.289	.262
650-SESD0402P1BN0450	SESD0402P1BN-0450-090	E	0402	±10	±16	9V	4.5	5.5	.24	.21	.16

