

Specification Status: Released

Electrical Rating

Voltage: 32 V_{DC} MAX

Current: 100 A MAX


Insulating Material:


Cured, Flame Retardant Epoxy Polymer

Lead Material:

20 AWG Tin Plated Copper

Part Marking:

— Manufacturer's Mark
 E3 and Part Identification

 — Lot Identification

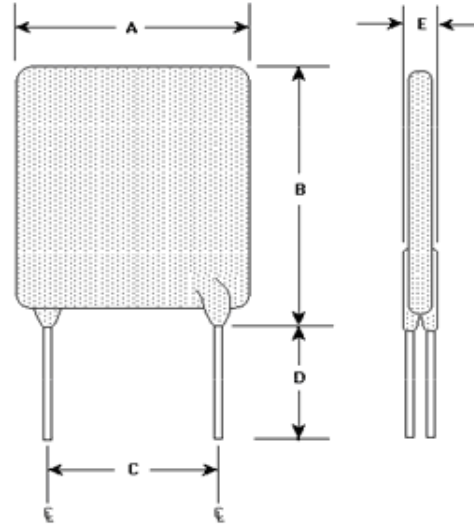


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	A		B		C		D		E	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
mm:	--	10.2	--	15.5	4.32	5.84	7.6	--	--	3.8
in*:	--	(0.40)	--	(0.61)	(0.17)	(0.23)	(0.3)	--	--	(0.15)

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

I HOLD RATED CURRENT	CURRENT RATINGS		INITIAL RESISTANCE VALUES		TIME TO TRIP	R _a MAX	TRIPPED-STATE POWER DISSIPATION
AMPS AT 25°C HOLD	AMPS AT 25°C HOLD	AMPS AT 25°C TRIP	OHMS AT 25°C MIN	OHMS AT 25°C MAX	SECONDS AT 25°C, 15 A MAX	OHMS AT 25°C MAX	WATTS AT 25°C TYP
3.0	3.0	6.0	0.035	0.0688	5	0.11	3.2

Reference Documents:

PS400, PS300 (reference for R₁ MAX)

Precedence:

This specification takes precedence over documents referenced herein.

Effectivity:

Reference documents shall be the issue in effect on the date of invitation for bid.

CAUTION:

Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

Materials Information

ROHS Compliant

ELV Compliant

Pb-Free

Halogen Free*

Directive 2002/95/EC
Compliant

Directive 2000/53/EC
Compliant



* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.

TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:

ELECTRICAL STRESS TESTS	TEST CONDITIONS (see note 2)
ESD Voltage Withstand (see note 1)	25kV
Short Circuit Fault Current Durability	25 cycles, 32V, 200A
Fault Current Durability	350 cycles, 32V/100A
End-of-life Mode Verification	1750 cycles, 32V/100A
Jump Start Endurance (see note 1)	3 cycles, 48V, 2-minute duration
Load Dump Endurance (see note 1)	10 cycles, 86.5V

Note 1: The PolySwitch devices are tested in series with a load resistance and the voltages specified in the test conditions are shared between the PolySwitch device and the load resistance as specified in PS400.

Note 2: Please refer to Appendix A of PS400 for the detailed test procedures

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