

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AHRF450

DOCUMENT: SCD25183

REV LETTER: E

REV DATE: JULY 26,2016

PAGE NO.: 1 OF 2

Specification Status: Released

Electrical Rating Voltage: 16V_{DC} MAX

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

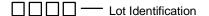
Lead Material:

20 AWG Tin Plated Copper (0.8 mm [0.032] nom. diameter)

Part Marking:

Manufacturer's Mark

XX H4.5 and Part Identification



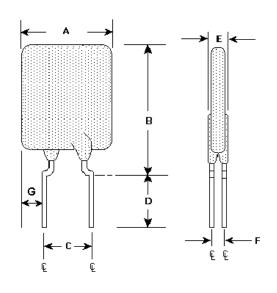


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		C		D		E		F	(G
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:		10.4		15.6	4.3	5.8	7.6	-		3.0	1.2		3.94
in*:		(0.41)	-	(0.61)	(0.17)	(0.23)	(0.30)		-	(0.12)	(0.05)	-	(0.16)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURRENT RATINGS		TIME TO TRIP	RESIS	STANCE	Ra MAX	TRIPPED-STATE POWER	
						DISSIPATION	
AMPS		SECONDS AT 25°C,	OHMS		OHMS	WATTS AT	
AT 25°C		22.5 A	AT	25°C	AT 25°C	25°C	
HOLD	TRIP	MAX	MIN	MAX		TYP	
4.5	8.7	4.0	0.017	.036	0.054	3.6	

Reference Documents: PS400, PS300 (reference for R_{1 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



HF

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



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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, 16V, 200A
Fault Current Durability	350 cycles, 16V/100A
End-of-life Mode Verification	1750 cycles, 16V/100A
Jump Start Endurance (see note 1)	3 cycles, 26V, 1 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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