

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AHRF1000

DOCUMENT: SCD25187

REV LETTER: D

REV DATE: JULY 26, 2016

PAGE NO.: 1 OF 2

Specification Status: Released

Electrical Rating Voltage: 16V_{DC} MAX

Insulating Material:

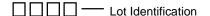
Cured, Flame Retardant Epoxy Polymer

Lead Material:

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

Part Marking:

mm in*:



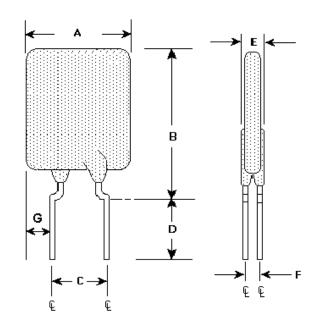


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		С		D		Е		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
n:		17.5		26.5	9.4	10.9	7.6			3.0	1.2		7.47
:		(0.69)		(1.04)	(0.37)	(0.43)	(0.30)			(0.12)	(0.05)		(0.29)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURF		TIME TO TRIP	RESISTANCE		R _{a MAX}	TRIPPED-STATE POWER
RATINGS		IRIP				DISSIPATION
AM	PS	SECONDS AT	OH	HMS	OHMS	WATTS AT
AT 2	5°C	25°C, 50 A	AT:	25°C	AT 25°C	25°C
HOLD	TRIP	MAX	MIN	MAX		TYP
10.0	20.5	10.5	.0051	.0105	0.015	5.3

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





^{*} 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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