

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AHRF050

DOCUMENT: SCD26629 REV LETTER: E

REV DATE: JULY 26,2016

PAGE NO.: 1 OF 2

Specification Status: Released

Electrical Rating
Voltage: 30V MAX
Current: 40A MAX

Insulating Material:

Cured, Flame Retardant Epoxy Polymer meets UL94 V-0 Requirements

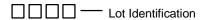
Lead Material:

24 AWG Tin Plated Copper Clad Steel (0.51mm[0.020]nom. diameter)

Part Marking:

Manufacturer's Mark

MH0.5 and Part Identification



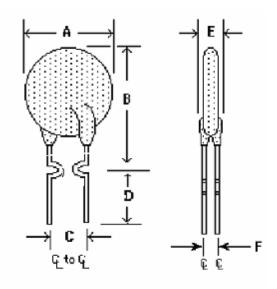


TABLE I. DIMENSIONS:

	Α		В		С		D		E		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
mm:	-	7.4		12.7	4.3	5.8	7.6		1	3.3	1.2
in*:	-	(0.29)		(0.50)	(0.17)	(0.23)	(0.30)		1	(0.13)	(0.05)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURRENT RATINGS		RATINGS	TIME TO TRIP	RESIS	TIAL TANCE LUES	R _{а МАХ}	TRIPPED-STATE POWER DISSIPATION	
	AMPS		SECONDS AT	OHMS		OHMS	WATTS AT	
	AT 25°C		25°C, 2.5A	AT 25°C		AT 25°C	25°C 16V	
	HOLD	TRIP	MAX	MIN	MAX	MAX	TYP	
	0.50	1.00	3.0	0.35	0.78	1.10	0.9	

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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