

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AHEF100

DOCUMENT : SCD26997

REV LETTER: D

REV DATE: JULY 26,2016

PAGE NO.: 1 OF 2

Specification Status: Released

Electrical Rating
Voltage: 32V_{DC} MAX
Current: 100A MAX

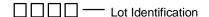
Insulating Material:

Cured, Flame Retardant Epoxy Polymer

Lead Material:

24 AWG Tin Plated Copper Clad Steel

Part Marking:



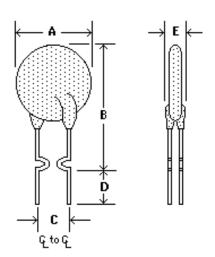


TABLE I. DIMENSIONS:

	Α		В		С		D		Е	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
mm:		9.7		13.6	4.3	5.8	7.6			3.0
in*:		(0.38)		(0.54)	(0.17)	(0.23)	(0.30)			(0.12)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

I HOLD	I HOLD CURRENT		INI	ΓIAL	TIME TO TRIP	R _{aMAX}	TRIPPED-
RATED	RATED RATINGS		RESIS	TANCE			STATE POWER
CURRENT	CURRENT		VAL	UES			DISSIPATION
AMPS	AMPS		OHMS		SECONDS AT	OHMS	WATTS
AT 25°C	AT 25°C		AT 25°C		25°C, 5.0 A	AT 25°C	AT 25°C
HOLD	HOLD	TRIP	MIN	MAX	MAX	MAX	TYP
1.0	1.0	1.9	0.15	0.30	6.2	0.43	1.4

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, 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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