

PolySwitch® PTC Devices

PRODUCT: AGRF800S-1

Overcurrent Protection Device

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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



and Part Identification

Lot Identification

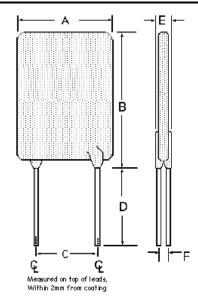


TABLE I. DIMENSIONS:

	Α		В		С		D		E		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
mm::		12.7	16.0	20.9	4.3	5.8	25.4			3.0	1.2
in*:		(0.50)	(0.630)	(0.820)	(0.17)	(0.23)	(1.00)			(0.12)	(0.05)

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURR	RENT RA	TINGS	TIME TO TRIP	INITIAL RESISTANCE		R _{1 MAX} 1 HR. POST TRIP RESISTANCE STANDARD TRIP	R _{A MAX}	TRIPPED- STATE POWER DISSIPATION
HOLD AT	AMPS AT 25°C HOLD AT RA MAX	; TRIP	SECONDS AT 25°C, 40 A MAX		IMS 25°C MAX	OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
8.0	7.6	15.0	5.5	0.0049	0.0113	0.0175	0.0181	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





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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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