

#### **GENERAL PURPOSE SILICON RECTIFIER**

#### **Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ♦ High forward surge current capability
- ◆ High temperature soldering guaranteed:
   250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

## **Mechanical Data**

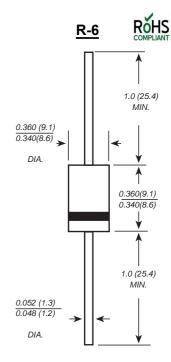
Case: JEDEC R-6 Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: Any

Weight: 0.072 ounce, 2.05 grams



Dimensions in inches and (millimeters)

# **Maximum Ratings And Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD 15A10	UNITS
Marking Code			
Maximum repetitive peak reverse voltage	Vrrm	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified current	l <sub>(AV)</sub>	15.0	А
0.375"(9.5mm) lead length at Ta=75°C	I(AV)		
Peak forward surge current			
8.3ms single half sine-wave superimposed	IFSM	500	A
on rated load (JEDEC Method)			
Maximum instantaneous forward voltage at 15.0A	VF	1.0	V
Maximum DC reverse current Ta=25°C		5.0	μA
at rated DC blocking voltage T <sub>A</sub> =100°C	l <sub>R</sub>	200	μΛ
Typical junction capacitance (NOTE 1)	Сл	150	pF
Typical thermal resistance (NOTE 2)	R 0 JA	15.0	°C/W
Operating junction and storage temperature range	ТЈ,Тѕтс	-65 to +175	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

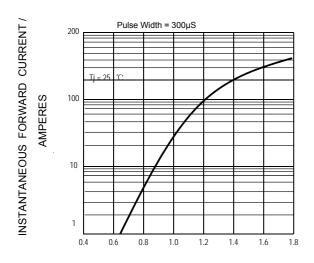
2. Thermal Resistance Junction to Ambient.

DN:T20717A0



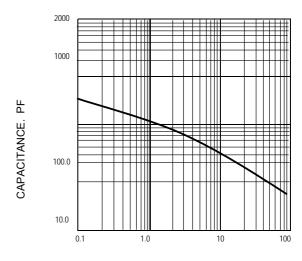
# **Ratings And Characteristic Curves**

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD VOLTAGE/VOLTS

FIG. 2 -- TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE / VOLTS

FIG. 3 -- FORWARD CURRENT DERATING CURVE

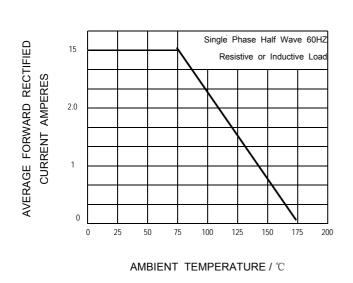
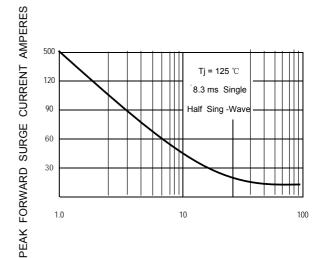


FIG. 4 -- PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60HZ

The curve above is for reference only.

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