

Standard Silicon Rectifiers

Reverse Voltage - 1000 V

Forward Current - 20 A

FEATURES

- ◆ Low cost . Diffused junction
- ◆ Low Leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ Easily cleaned with Freon. Alcohol. Isopropanol and similar solvents
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

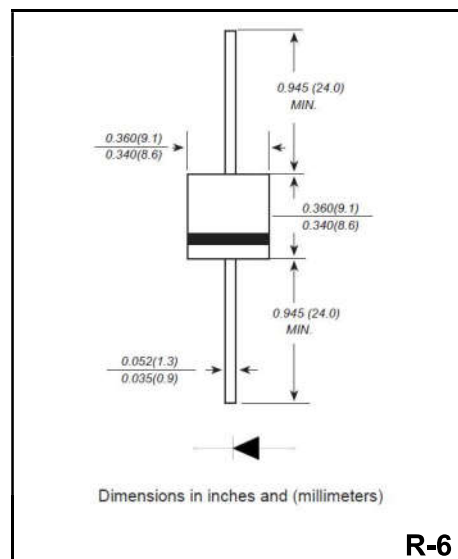
MECHANICAL DATA

- ◆ Case: R-6
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 2.05g / 0.072oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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



Parameter	Symbols	20A10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead Length. at $T_A = 75^{\circ}C$	$I_{F(AV)}$	20.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load $T_j = 125^{\circ}C$	I_{FSM}	800	A
Maximum Instantaneous Forward Voltage at 20A	V_F	1.0	V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Blocking Voltage $T_a = 100^{\circ}C$	I_R	10.0 100	μA
Typical Junction Capacitance	C_j	200	pF
Typical Thermal Resistance	$R_{\theta JA}$	10	$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-50 ~ +125	$^{\circ}C$

FIG. 1 — TYPICAL FORWARD CHARACTERISTICS

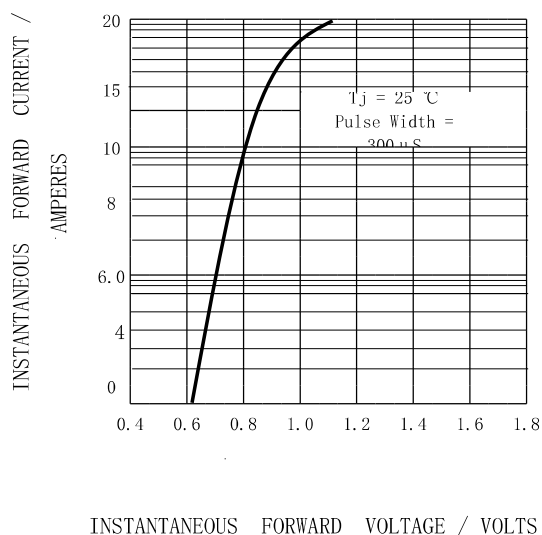


FIG. 2 — TYPICAL JUNCTION CAPACITANCE

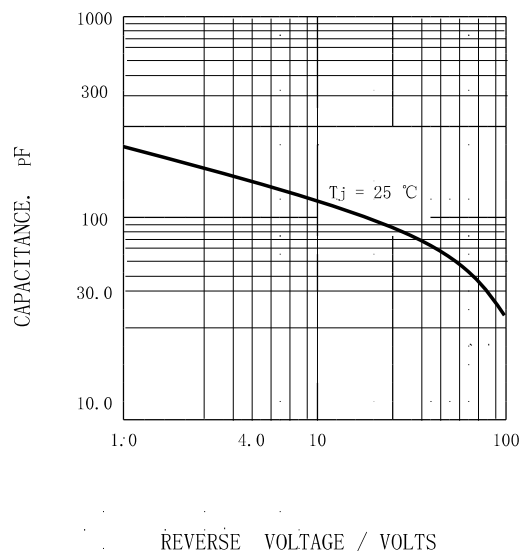


FIG. 3 — FORWARD CURRENT DERATING CURVE

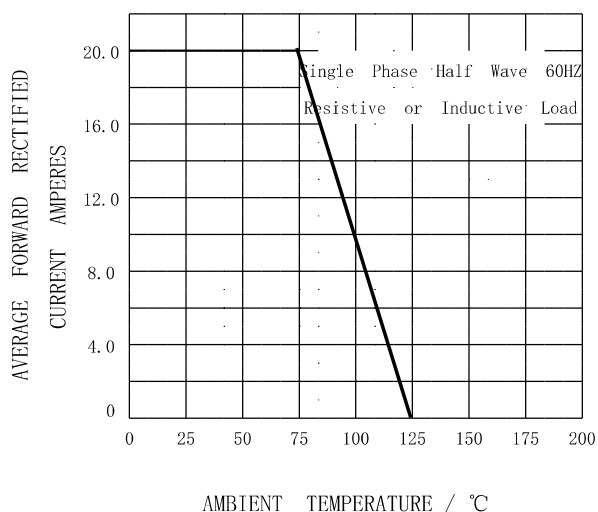
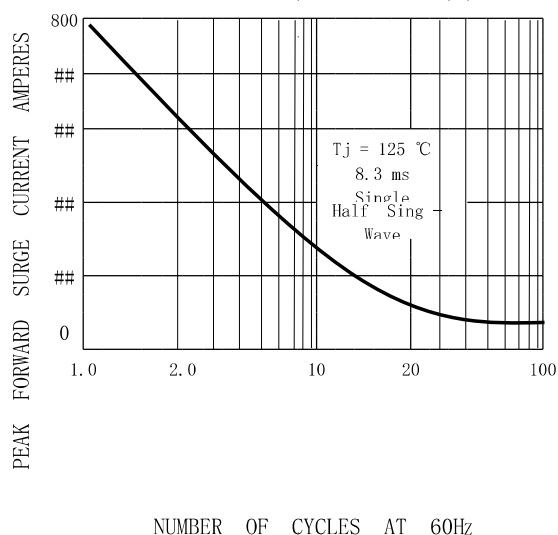
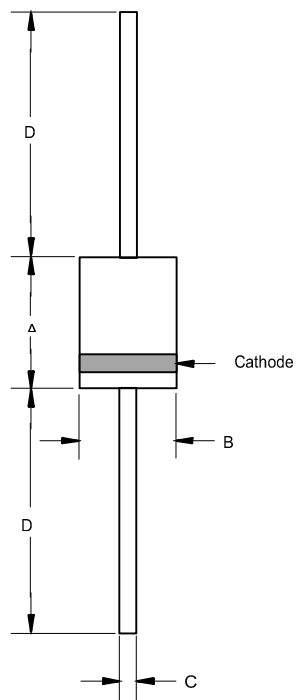


FIG. 4 — PEAK FORWARD SURGE CURRENT



Package Outline R-6



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
R-6	BOX	500	EIA-481-1