

Standard Silicon Rectifiers

Reverse Voltage - 100 to 1000 V

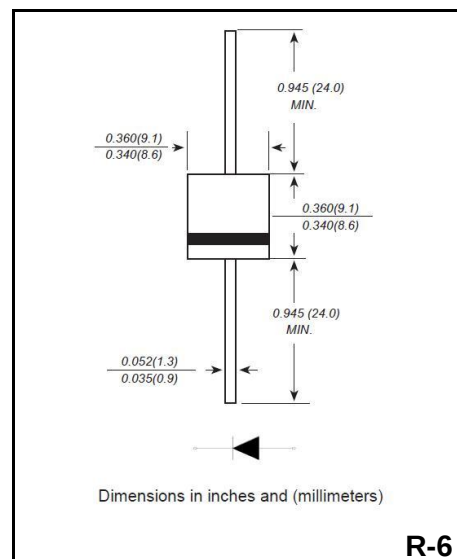
Forward Current - 6 A

FEATURES

- ◆For surface mounted applications
- ◆Open Junction chip
- ◆Low profile package
- ◆Ideal for automated placement
- ◆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	6A1	6A2	6A4	6A5	6A6	6A8	6A10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	500	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	350	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	500	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200.0							A
Maximum Instantaneous Forward Voltage at 6.0A	V_F	1.10							V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^{\circ}\text{C}$	I_R	10.0 500							μA
Typical Junction Capacitance ⁽¹⁾	C_j	100.0							pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	40.0							$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^{\circ}\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

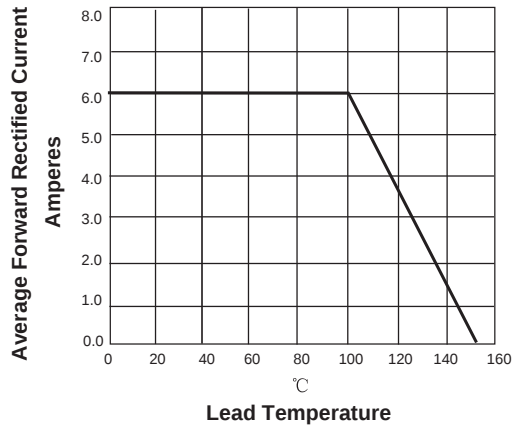


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

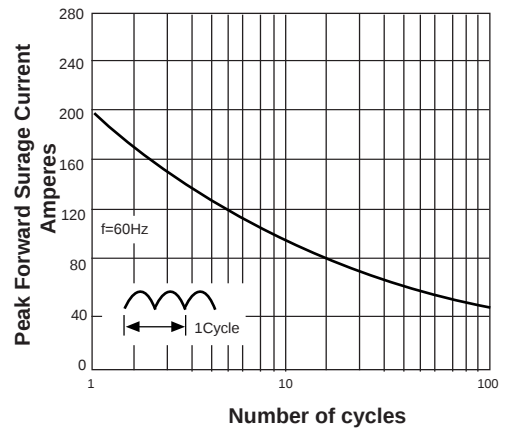


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

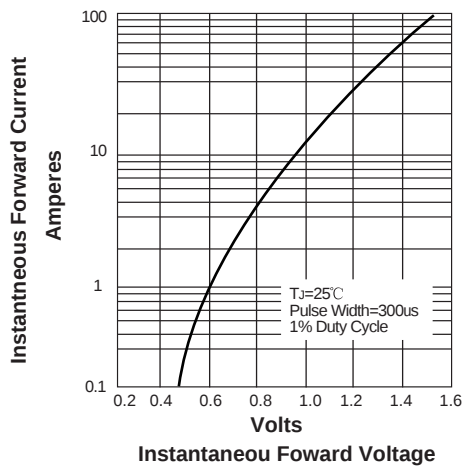
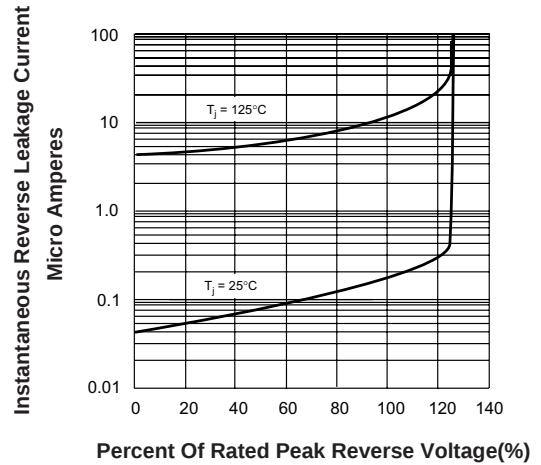
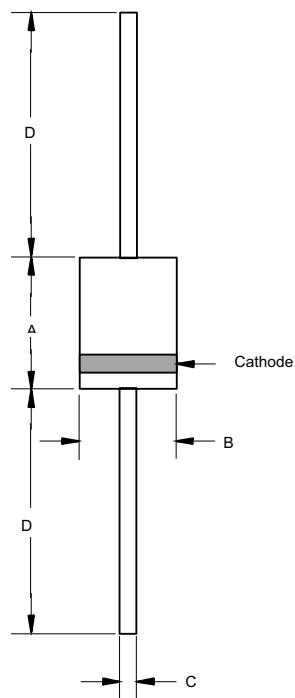


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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