

**Standard Silicon Rectifiers**

**Reverse Voltage - 100 to 1000 V**

**Forward Current - 6 A**

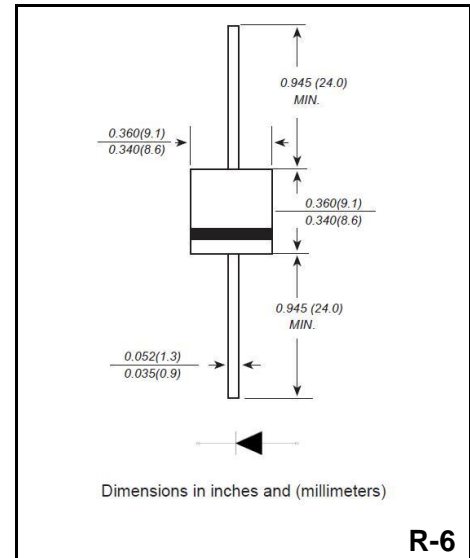
**FEATURES**

- ◆ 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							$\mu\text{A}$
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	100.0							pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	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

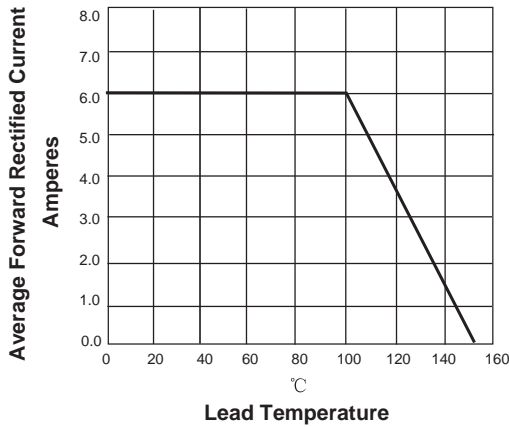


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

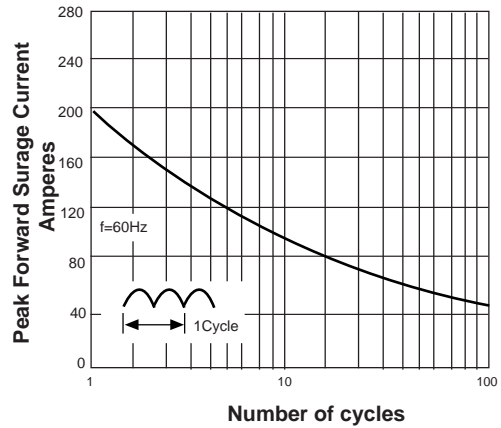


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

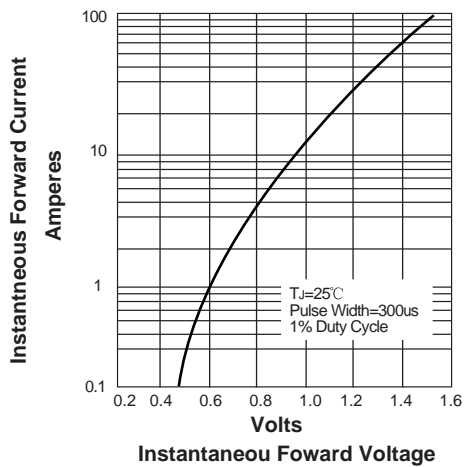
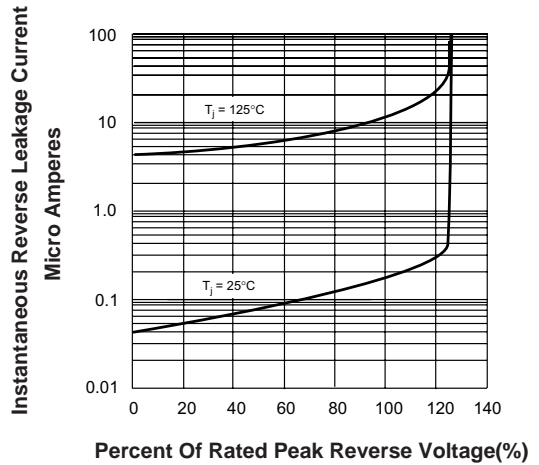
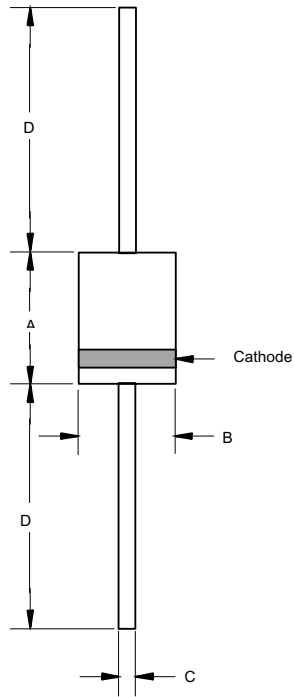


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



**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