Standard Silicon Rectifiers

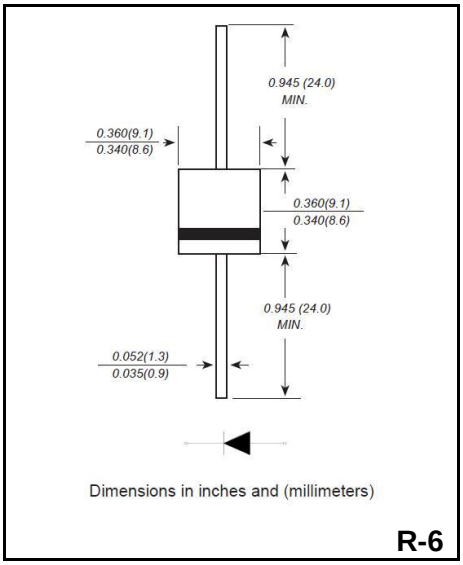
Reverse Voltage - 100 to 1000 V
Forward Current - 10 A

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



R-6

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	10A1	10A2	10A4	10A5	10A6	10A8	10A10	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 °C	$I_{F(AV)}$	10.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	400.0							A
Maximum Instantaneous Forward Voltage at 10A	V_F	1.10							V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	10.0 500							μA
Typical Junction Capacitance (1)	C_j	150.0							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	40.0							℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							℃

（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

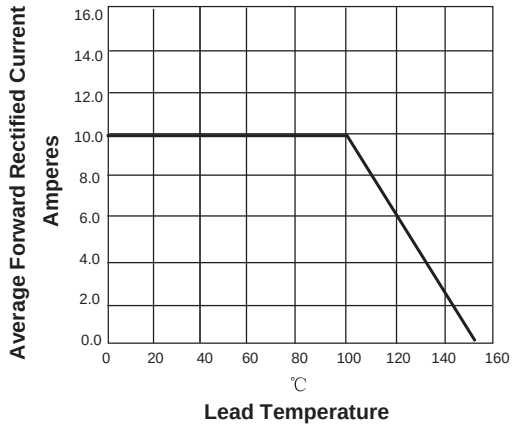


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

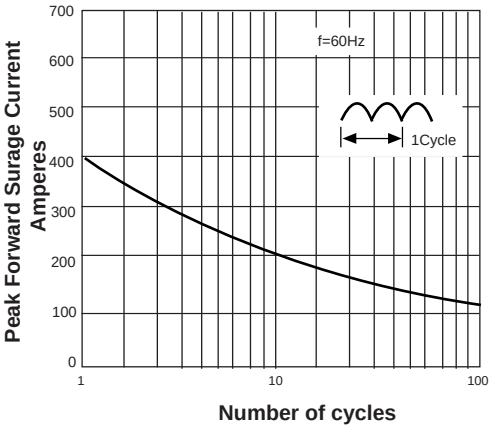


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

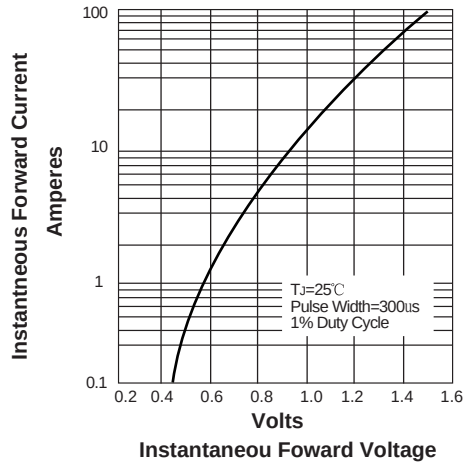
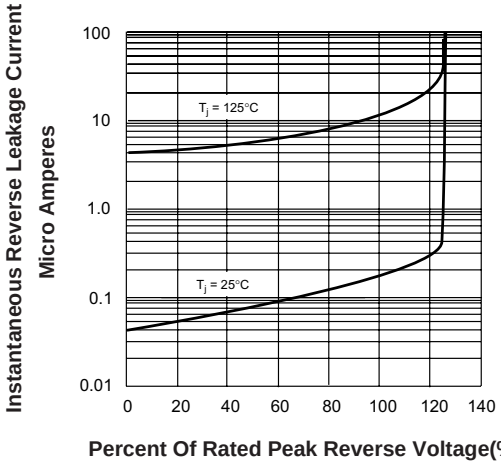
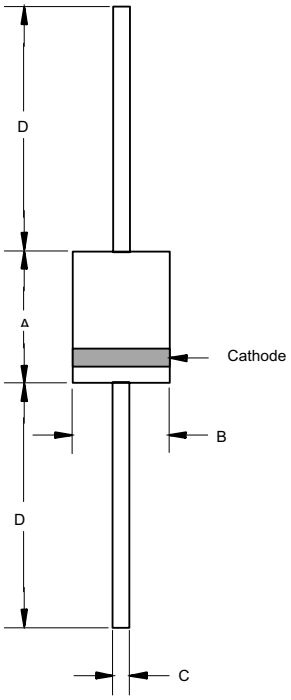


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline R-6



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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