

6.0 A Plastic Silicon Rectifier
Rectifier Reverse Voltage 50 to 1000V

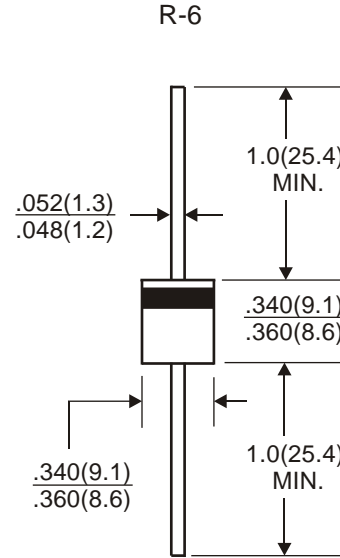


Features

- Diffused junction
- High current capability and low Forward Voltage Drop
- Surge overload rating to 400A peak
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
 Terminals: Solder plated solderable per MIL-STD-202, Method 208
 Polarity: Cathode band
 Mounting Position: Any
 Weight: 2.1 grams (approx)



All dimensions inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=75°C	IF(AV)	6.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	400							A
Typical thermal resistance	ReJA	10							°C/W
Typical junction capacitance	Cj	150							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 175							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

Parameter	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Unit
Maximum instantaneous forward voltage drop per leg at 6.0A	VF	1.0							V
Maximum DC reverse current at rated DC blocking voltage per element	IR	5.0 50.0							μA

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

6A05 thru 6A10

Fig. 1 Derating Curve for Output Rectified Current

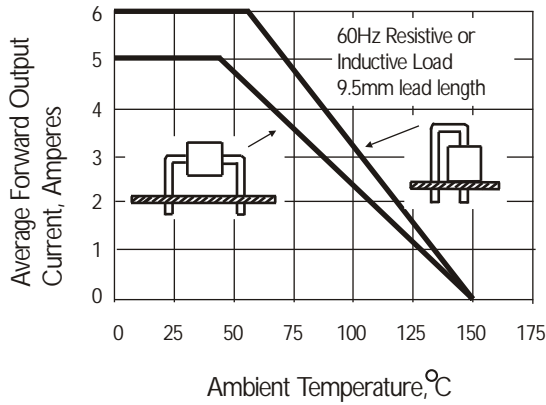


Fig. 2 Derating Curve for Output Rectified Current

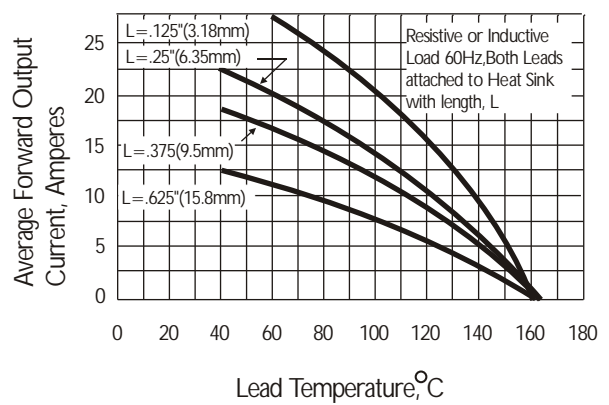


Fig. 3 Typical Instantaneous Forward Characteristics

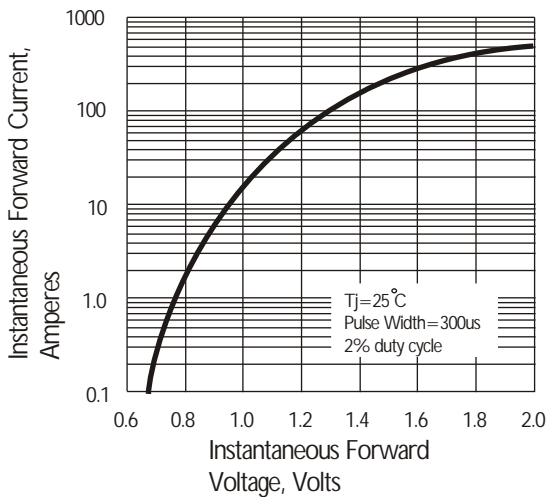


Fig. 4 Peak Forward Surge Current

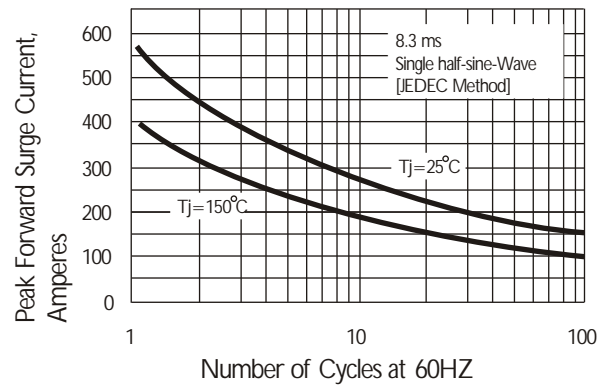


Fig. 5 Typical Transient Thermal Impedance

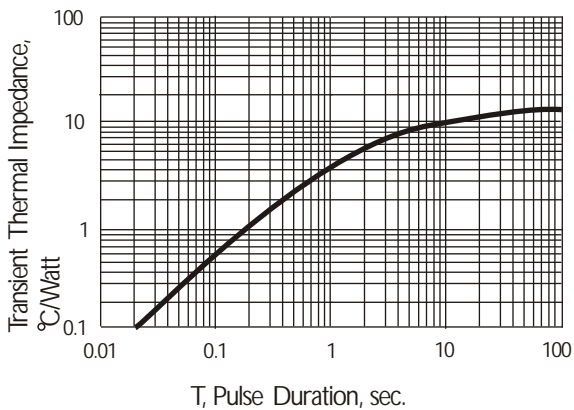


Fig. 6 Typical Reverse Characteristics

