

SUF1500 THRU SUF1508

**HIGH EFFICIENT
PLASTIC SILICON RECTIFIER**
VOLTAGE:50 TO 1000V CURRENT: 1.5A

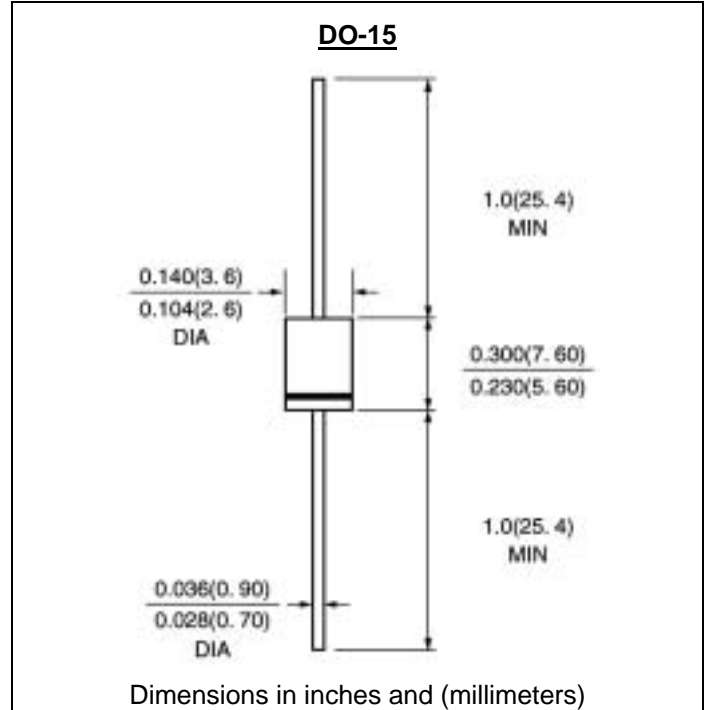


FEATURE

Low power loss
High surge capability
Ultrafast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375"lead length at 5 lbs tension

MECHANICAL DATA

Terminal:Plated axial leads solderable per MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYM BOL	SUF 1500	SUF 1501	SUF 1502	SUF 1504	SUF 1506	SUF 1507	SUF 1508	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current 3/8"lead length at Ta =55°C	If(av)	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50.0							A
Maximum Forward Voltage at Forward current 2.0A Peak	Vf	1.0			1.4	1.7		V	
Maximum DC Reverse Current T =25°C at rated DC blocking voltage Ta =100°C	Ir	10.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	Cj	50				30			pF
Typical Thermal Resistance (Note 3)	R(ja)	20.0							°C/ W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150							°C

Note:

- Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

Fig. 1 – Maximum Forward Current Derating Curve

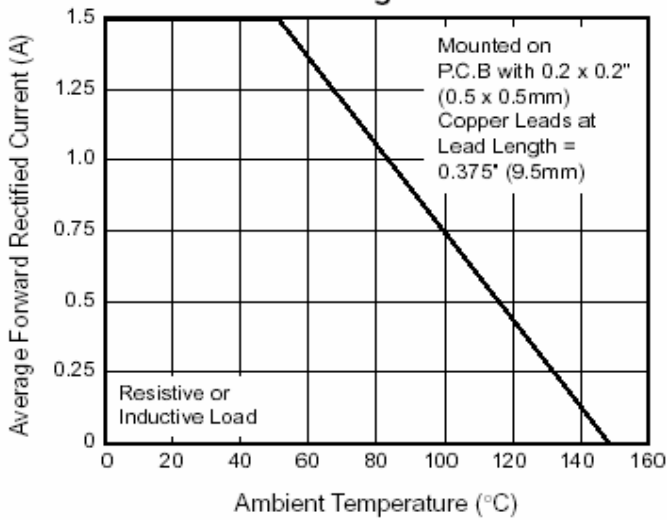


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

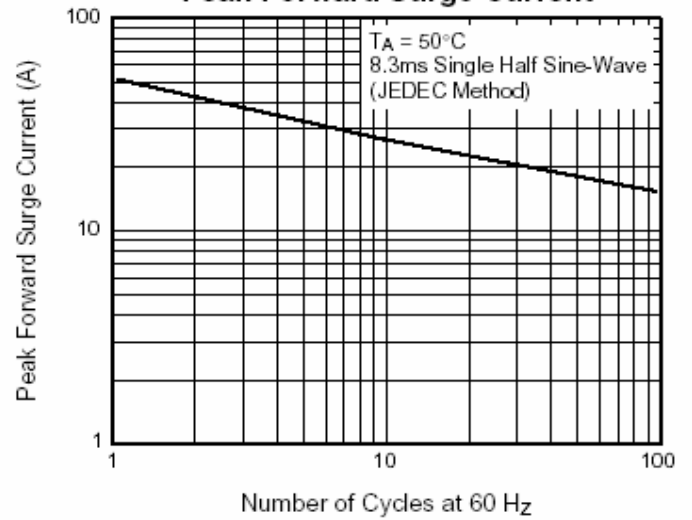


Fig. 3 – Typical Instantaneous Forward Characteristics

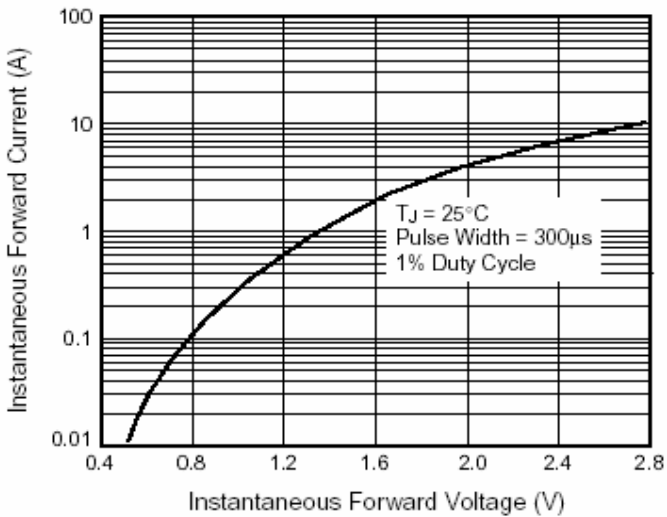


Fig. 4 – Typical Reverse Leakage Characteristics

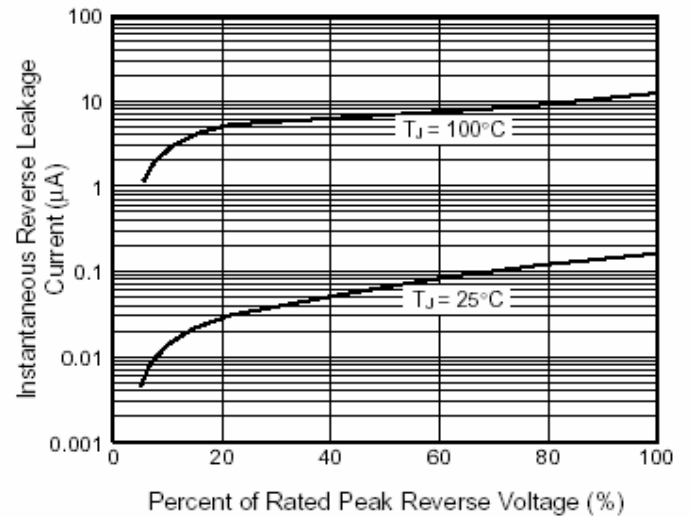


Fig. 5 – Typical Junction Capacitance

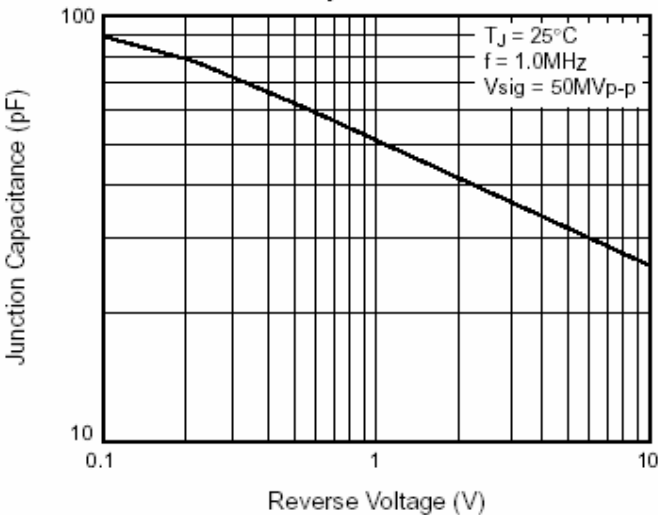


Fig. 6 – Typical Transient Thermal Impedance

