MUR105S THRU MUR1100S

ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

Voltage: 50 to 1000V **Current: 1.0A**

FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250℃/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

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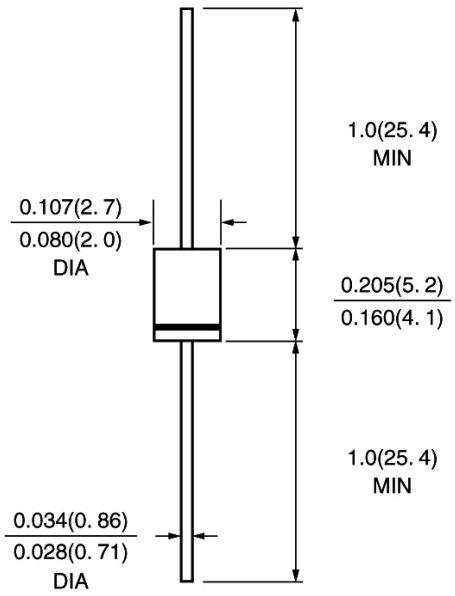

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	Symbol	MUR 105S	MUR 110S	MUR 120S	MUR 130S	MUR 140S	MUR 160S	MUR 180S	MUR 1100S	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	210	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	If(av)	1.0								A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	35.0								A
Maximum Instantaneous Forward Voltage at Rated forward current	Vf	0.875			1.25			1.75		V
Maximum DC Reverse Current Ta =25°C At rated DC blocking voltage Ta =125°C	Ir	10.0 100.0								μA
Maximum Reverse Recovery Time (Note 1)	Trr	25			50			75		nS
Typical Junction Capacitance (Note 2)	Cj	25								pF
Typical Thermal Resistance (Note 3)	Rth(ja)	27			50					℃ /W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150								°C

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

Fig. 1 – Forward Current Derating Curve

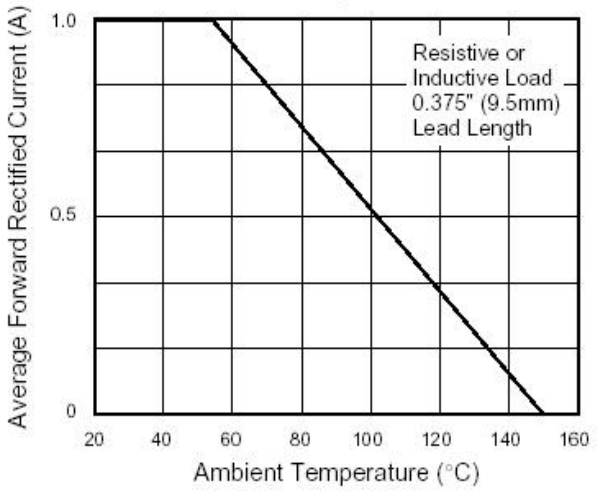

Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

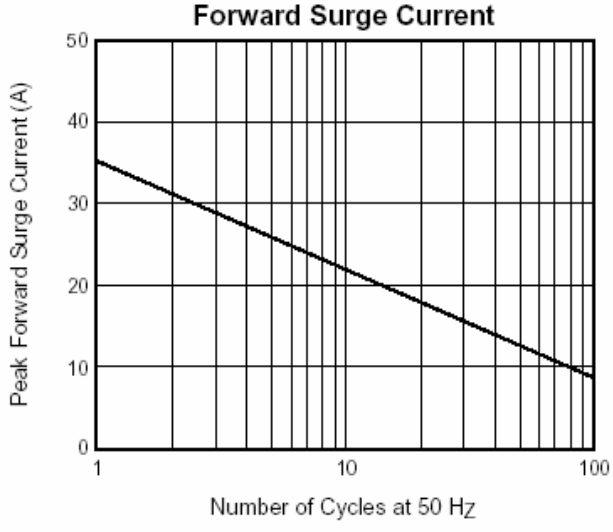

Fig. 3 – Typical Instantaneous Forward Characteristics

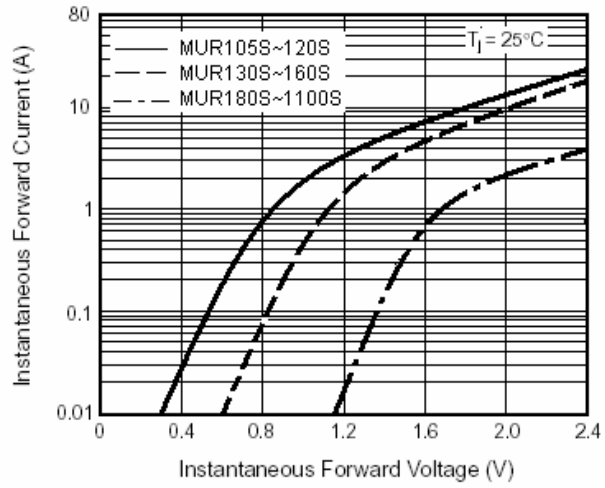

Fig. 4 – Typical Reverse Leakage Characteristics

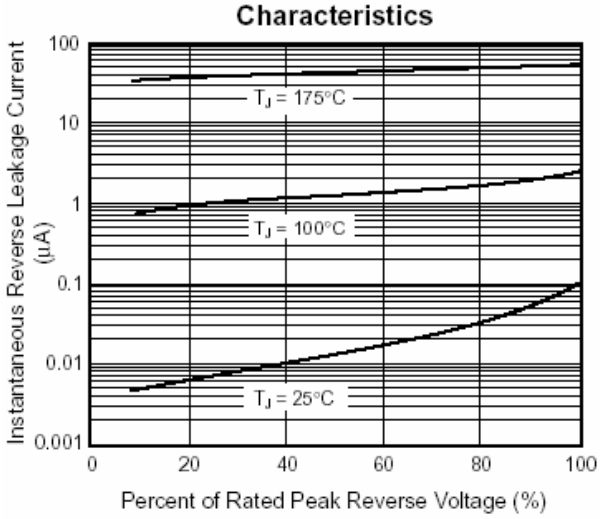

Fig. 5 – Typical Junction Capacitance