

MUR105S THRU MUR1100S

**ULTRAFAST EFFICIENT
PLASTIC SILICON RECTIFIER**
Voltage: 50 to 1000V Current: 1.0A



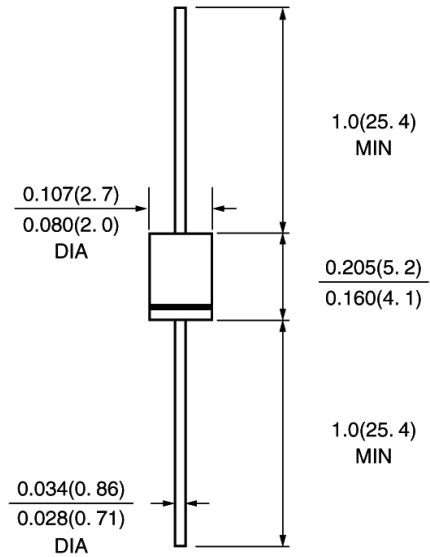
FEATURE

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

DO - 41\DO - 204AL



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	V _{rrm}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	210	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	I _{f(av)}	1.0								A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I _{fsm}	35.0								A
Maximum Instantaneous Forward Voltage at Rated forward current	V _f	0.875		1.25			1.75			V
Maximum DC Reverse Current Ta =25°C At rated DC blocking voltage Ta =125°C	I _r	10.0 100.0								µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	25		50			75			nS
Typical Junction Capacitance (Note 2)	C _j	25								pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	27			50					°C /W
Storage and Operating Junction Temperature	T _{stg, Tj}	-55 to +150								°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =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

RATINGS AND CHARACTERISTIC CURVES MUR120S THRU MUR1100S

Fig. 1 – Forward Current Derating Curve

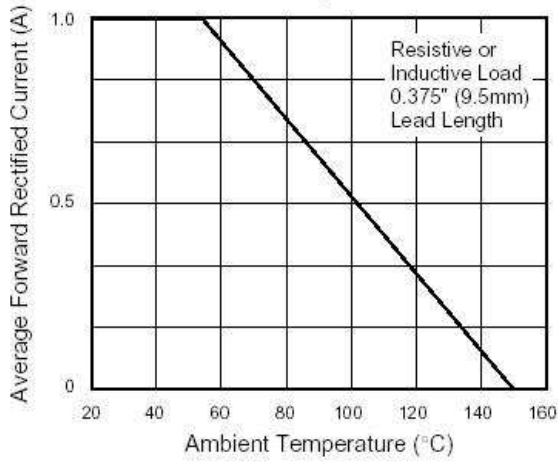


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

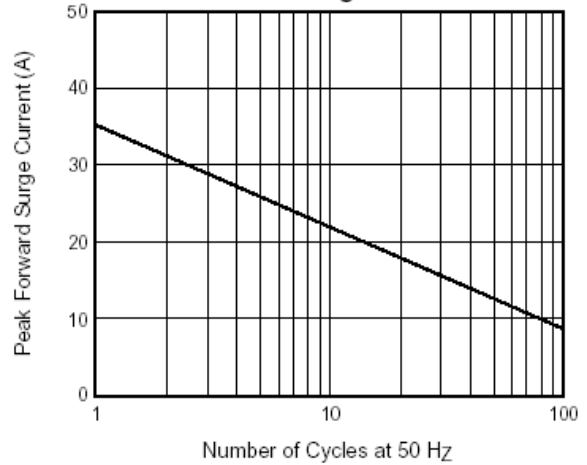


Fig. 3 – Typical Instantaneous Forward Characteristics

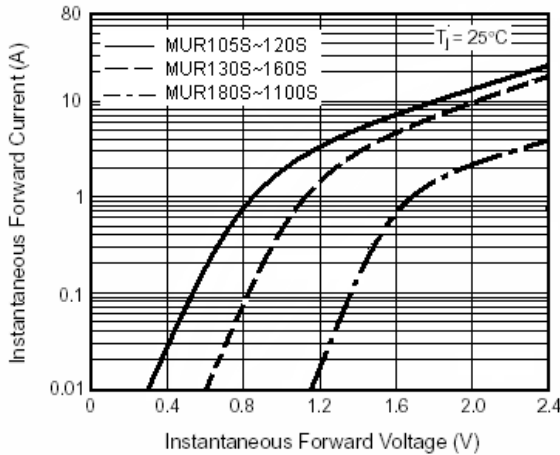


Fig. 4 – Typical Reverse Leakage Characteristics

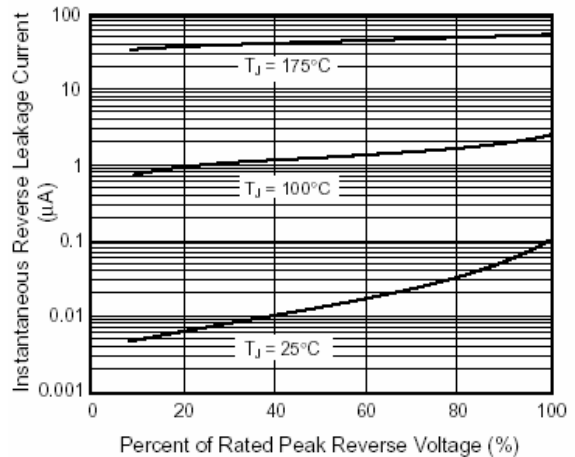


Fig. 5 – Typical Junction Capacitance

