MURS480-K

SURFACE MOUNT
ULTRAFAST RECTIFIER

VOLTAGE: 800V **CURRENT: 4.0A**

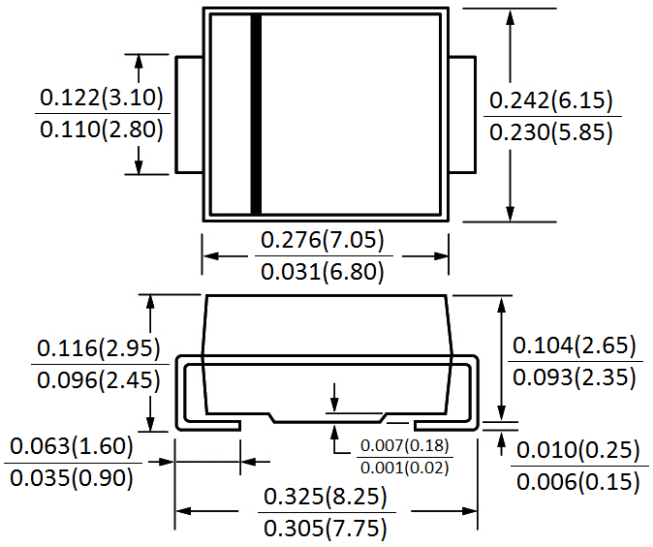
FEATURE

Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
Ultrafast recovery time for high efficiency
High surge capability
High temperature soldering guaranteed
260℃/10sec/at terminals
Glass passivated chip

MECHANICAL DATA

Terminals: Solder plated, solderable per J-STD-002
Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
Polarity: Color band denotes cathode end
Weight: 0.007 ounce, 0.21 gram
Mark: M480

SMC-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60Hz, resistive or inductive load rating at 25℃, unless otherwise stated)

	SYMBOL	MURS480-K	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	800	V
Maximum RMS Voltage	Vrms	560	V
Maximum DC blocking Voltage	Vdc	800	V
Maximum Average Forward Rectified	If(av)	4.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	120	A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.85	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10.0 100.0	μA
Maximum Reverse Recovery Time (Note1)	Trr	75	nS
Typical Junction Capacitance (Note 2)	Cj	50	pF
Typical Thermal Resistance, junction to lead	Rth(jl)	11	℃/W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150	℃

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

RATINGS AND CHARACTERISTIC CURVES MURS480-K

Fig. 1 – Forward Current Derating Curve

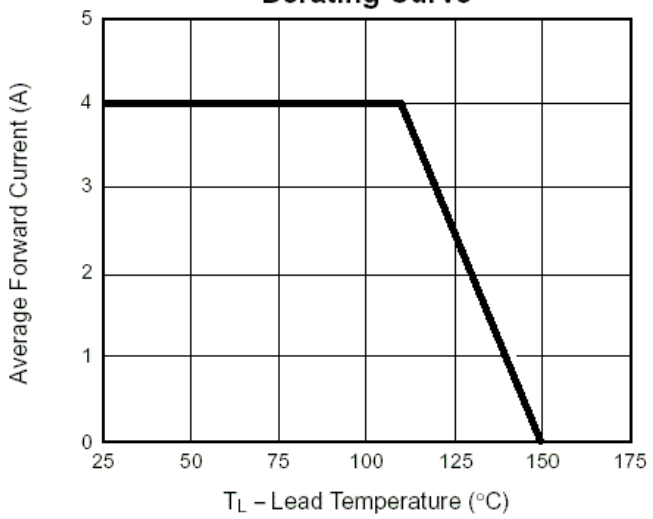


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

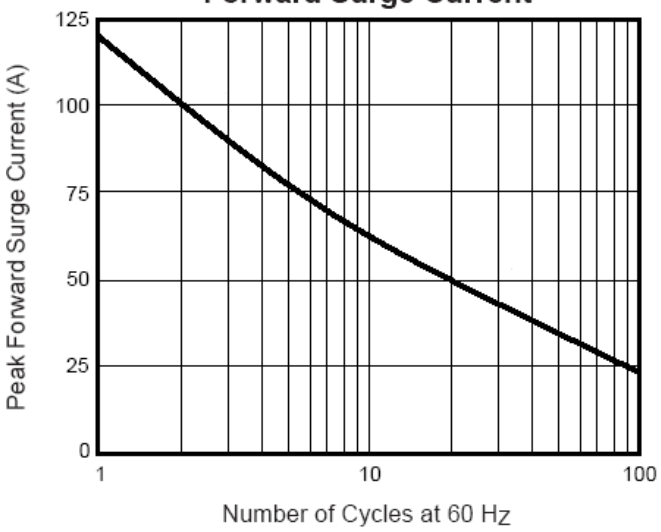


Fig. 3 – Typical Instantaneous Forward Characteristics

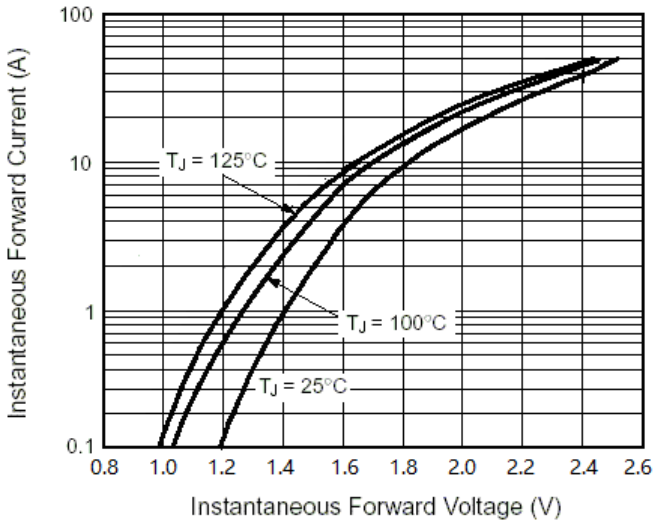


Fig. 4 – Typical Reverse Characteristics

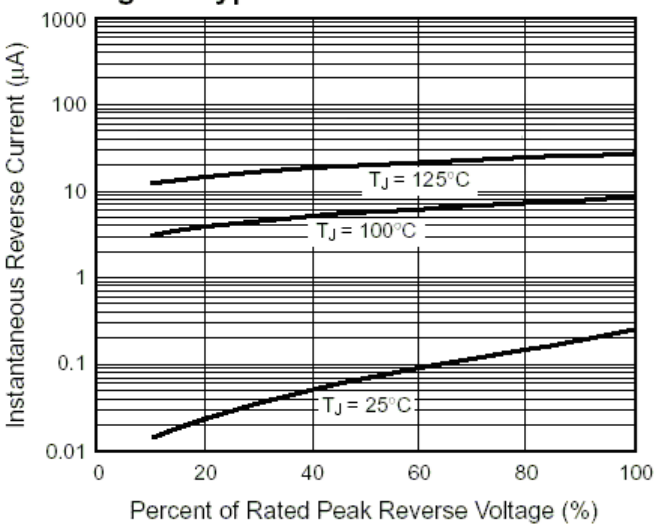


Fig. 5 – Typical Junction Capacitance