

MURS460-K-E

SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE: 600V

CURRENT: 4.0A

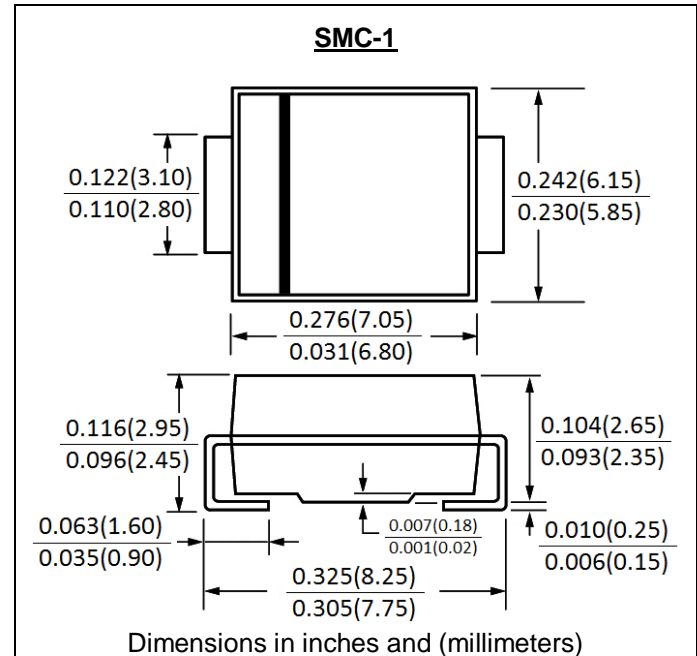


FEATURE

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°C/10sec/at terminals
Glass passivated chip
Halogen Free

MECHANICAL DATA

Terminals: Solder plated, solderable per J-STD-002
Case: Molded with UL-94 class V-0 recognized Halogen Free Epoxy
Polarity: Color band denotes cathode end
Weight: 0.007 ounce, 0.21 gram
Mark: M460



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	MURS460-K-E	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified Current T _L =105°C	I _{f(av)}	4.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	110	A
Maximum Instantaneous Forward Voltage at rated forward current	V _f	1.28	V
Maximum DC Reverse Current Ta =25°C	I _r	10	μA
at rated DC blocking voltage Ta =125°C		100	
Maximum Reverse Recovery Time (Note1)	T _{rr}	45	nS
Typical Junction Capacitance (Note 2)	C _j	50	pF
Typical Thermal Resistance, junction to lead (Note 3)	R _{th(jl)}	11	°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
3. Units mounted on P.C.B. with 8×8mm copper pad areas

Fig. 1 – Forward Current Derating Curve

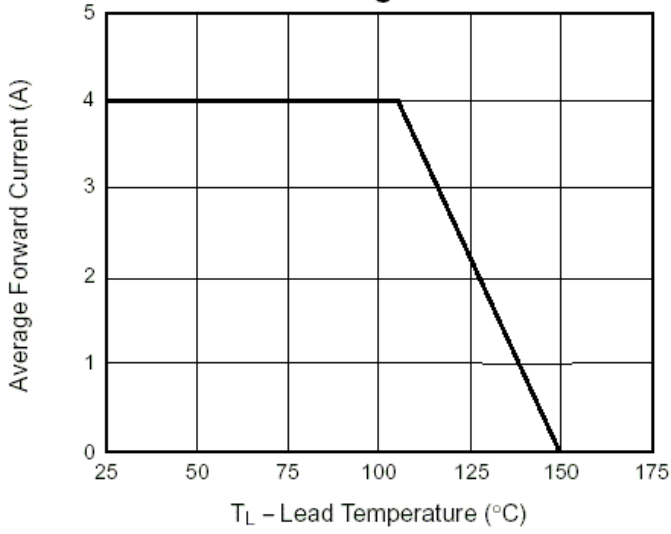


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

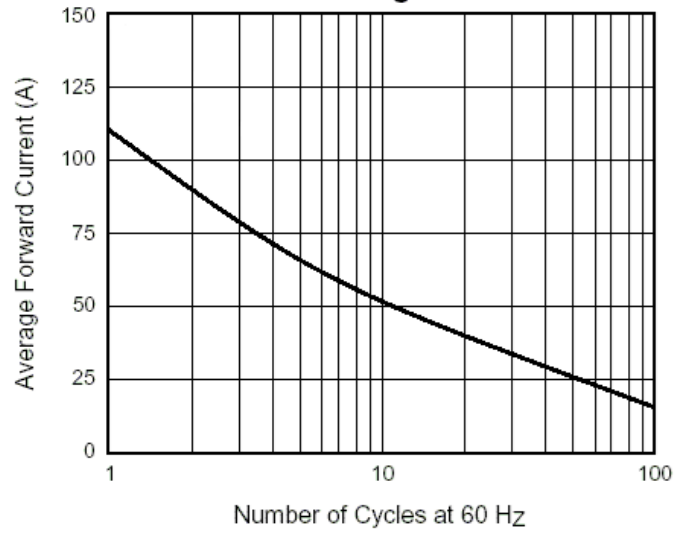


Fig. 3 – Typical Instantaneous Forward Characteristics

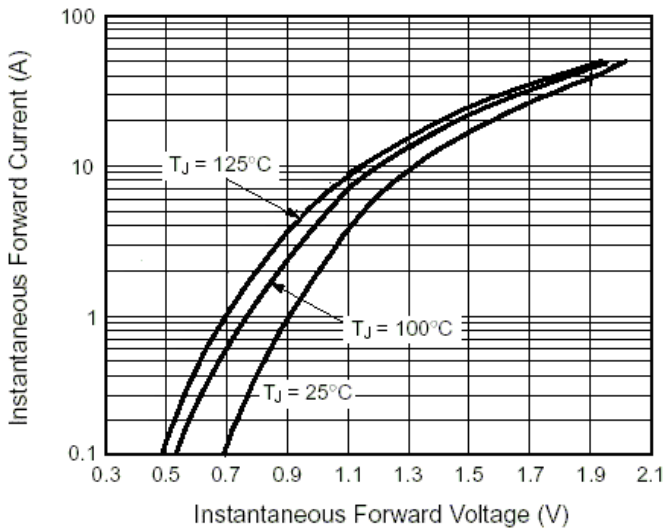


Fig. 4 – Typical Reverse Characteristics

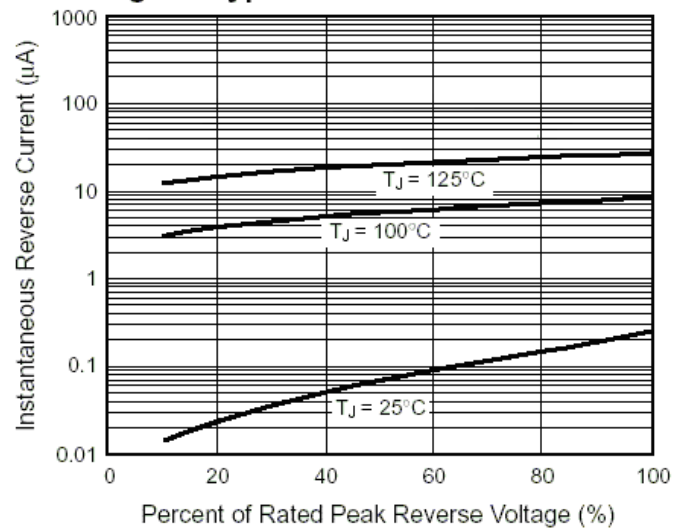


Fig. 5 – Typical Junction Capacitance

