MURS360-E-K

SURFACE MOUNT
ULTRAFAST RECTIFIER

VOLTAGE: 600V **CURRENT: 3.0A**

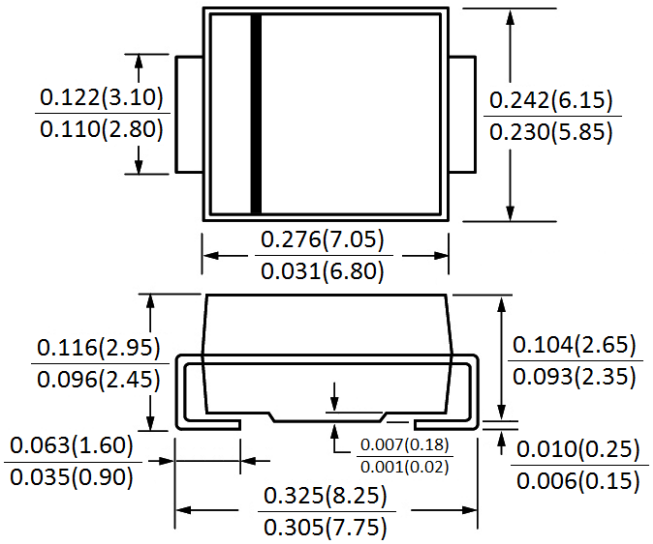
FEATURE

Plastic package has Underwriters Laboratories Flammability Classification 94V-
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
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: M360

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	MURS360-E-K	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified Current T_L =130℃ T_L =115℃	If(av)	3.0 4.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	Ifsm	125.0	A
Maximum Instantaneous Forward Voltage at 3.0A	Vf	1.25	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10.0 50.0	μA
Maximum Reverse Recovery Time (Note1)	Trr	50	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 +175	℃

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

Fig. 1 – Forward Current Derating Curve

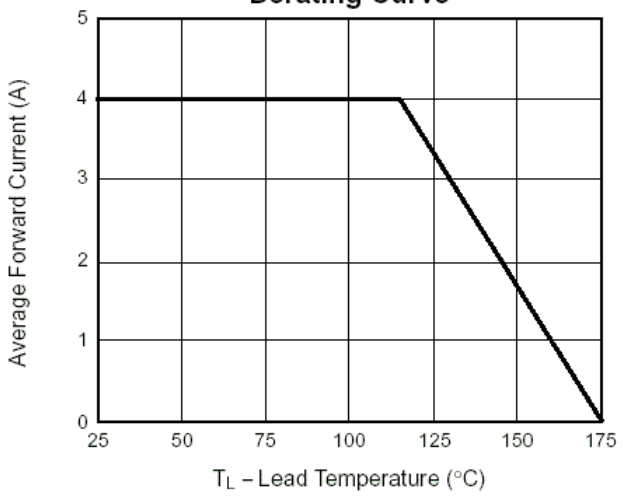


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

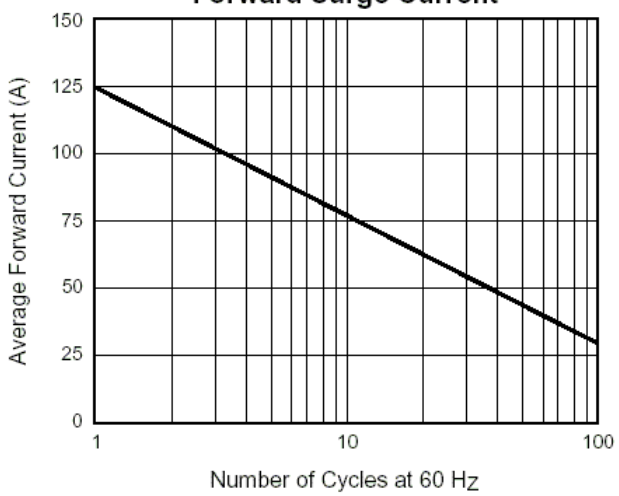


Fig. 3 – Typical Instantaneous Forward Characteristics

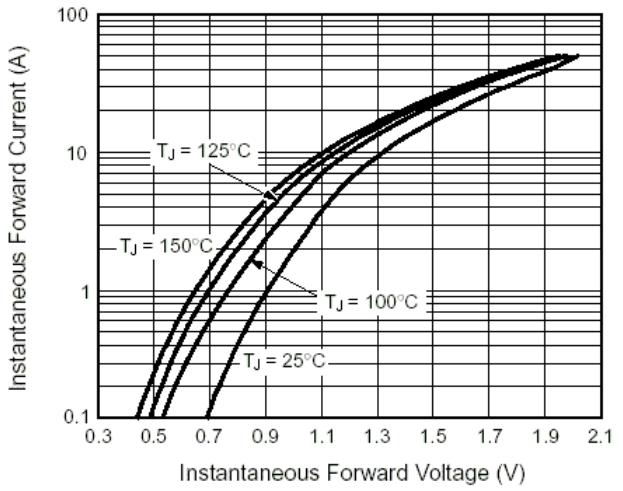


Fig. 4 – Typical Reverse Characteristics

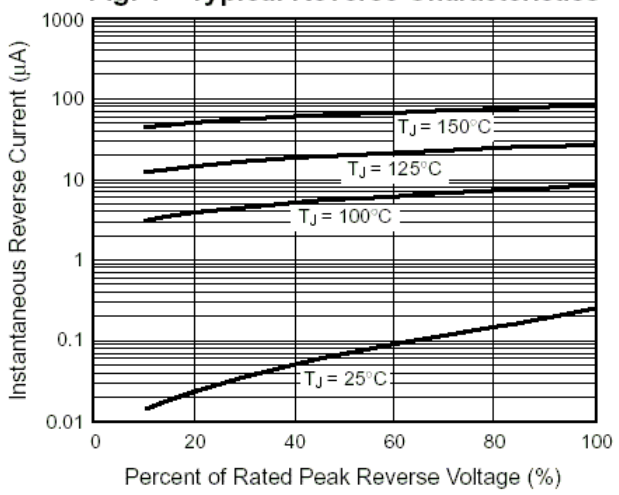


Fig. 5 – Typical Junction Capacitance