GU3KR-B-E

SURFACE MOUNT FAST ULTRAFAST RECTIFIER

VOLTAGE：800V **CURRENT： 3.0A**

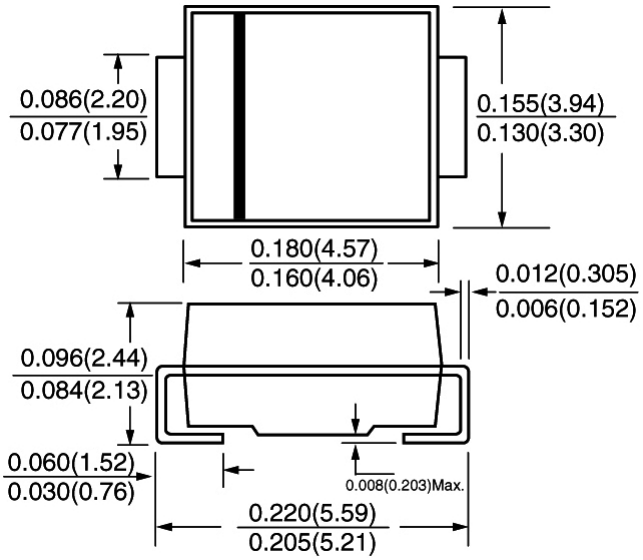
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260℃/10sec/at terminals
Glass passivated chip
Fast recovery time for high efficiency
Halogen Free

MECHANICAL DATA

Terminal：Solder plated, solderable per MIL-STD 750, method 2026
Case：Molded with UL-94 class V-0 recognized Halogen Free Epoxy
Polarity：color band denotes cathode

SMB



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	GU3KR-B-E	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 Current 3/8″lead length at T_L =75℃	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	Ifsm	100.0	A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.7	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10.0 500.0	μA μA
Maximum Reverse Recovery Time (Note1)	Trr	75	nS
Typical Junction Capacitance (Note 2)	Cj	50	pF
Typical Thermal Resistance (Note 3)	Rth(jl)	18	℃/W
Storage and Operating Junction Temperature	Tstg, Tj	-50 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
3. Thermal Resistance from Junction to terminal mounted on 7×7mm copper pad area

Fig. 1 — Forward Current Derating Curve

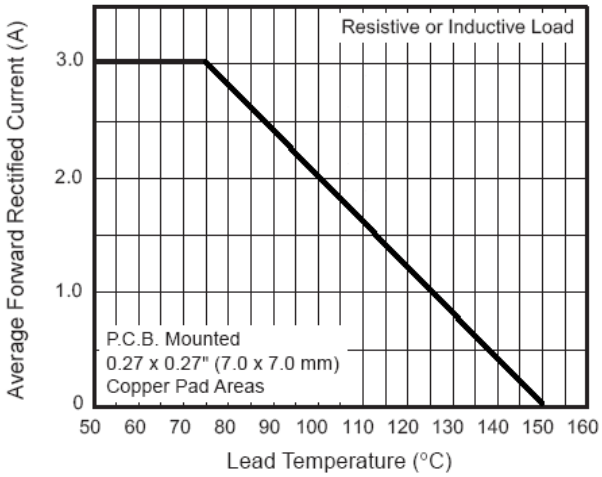


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

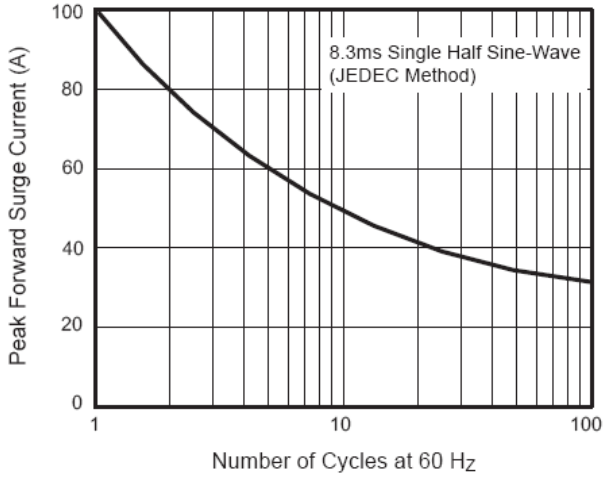


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

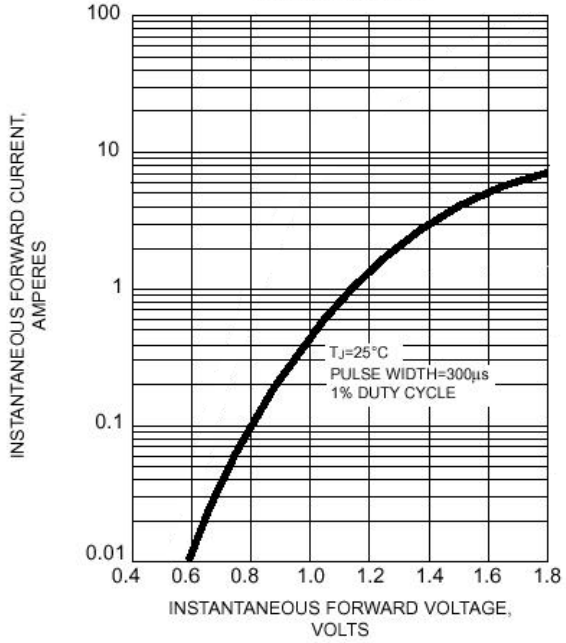


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

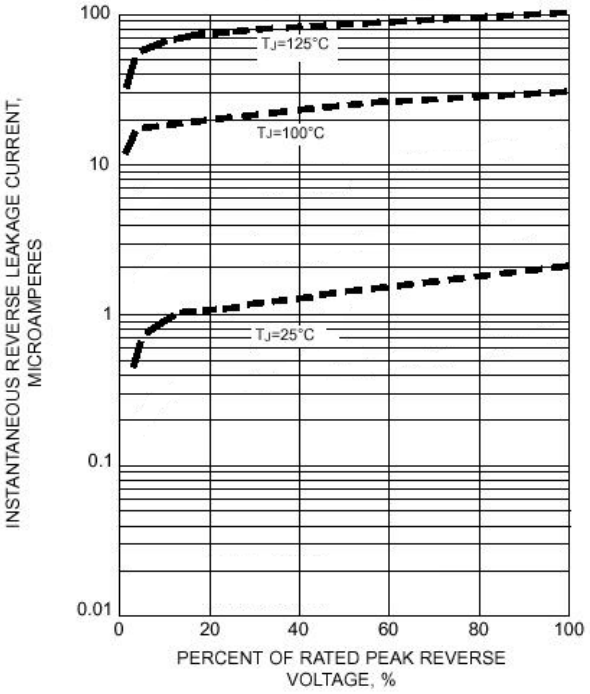


FIG. 5 - TYPICAL TRANSIENT THERMAL IMPEDANCE