MURB1J-EVL

SUPERFAST RECOVERY RECTIFIER

VENKEL LTD.

PART NUMBER	PACKAGE	VOLTAGE	CURRENT	CIRCUIT CONFIGURATION
MURB1J-EVL E= 7" Embossed T&R (800) U = 13" Embossed T&R (3,000)	SMB	600V	1A	SINGLE

FEATURES:

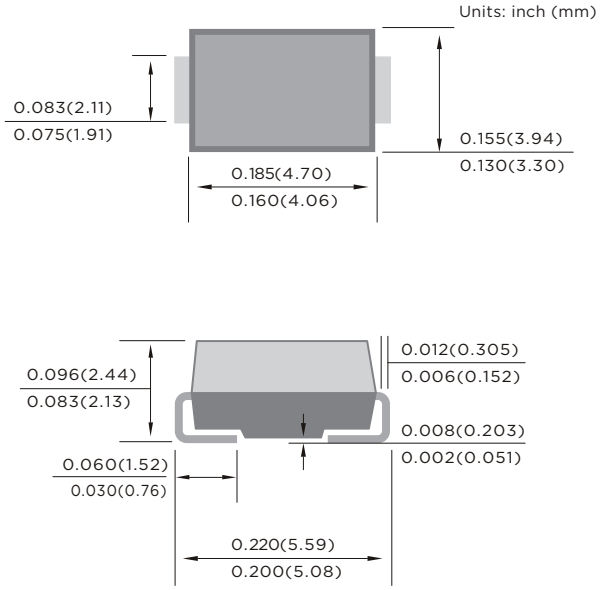
- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Hermetically sealed
- Low leakage
- High surge capacity
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound

MECHANICAL DATA:

- Case: Molded plastic SMB
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0032 ounces, 0.092 grams

Cathode Anode

SMB



MAXIMUM RATINGS

(TA=25˚C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_R	600	V
Maximum Average Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30	A
Maximum Forward Voltage at 1A	V_F	1.25	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5	μA
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +175	˚C
Maximum reverse recovery time (4)	T_{RR}	50	ns
Typical thermal resistance (1, 3)	$R_{\theta JC}$	20	˚C/W
	$R_{\theta JA}$	135	

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area
1. The testing condition of the thermal resistance (junction to lead) is based on 10mm lead length between two 10cm x 10cm FR4 PCB single-sided copper pad
3. Mounted on a FR4 PCB, single-sided copper, mini pad
4. Reverse Recovery Test Conditions : I_F=0.5A, I_R=1A, Recover to 0.25A

ENVIRONMENTAL INFORMATION

RoHS Status	10 of 10 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	1

RoHS Compliant
REACH Compliant
HF Halogen FREE
Conflict Minerals FREE 3TG

TYPICAL CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

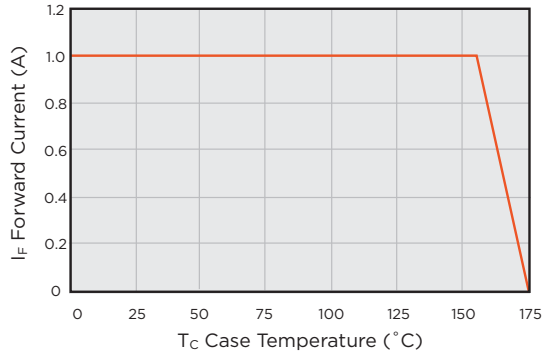


Fig.2 Typical Junction Capacitance

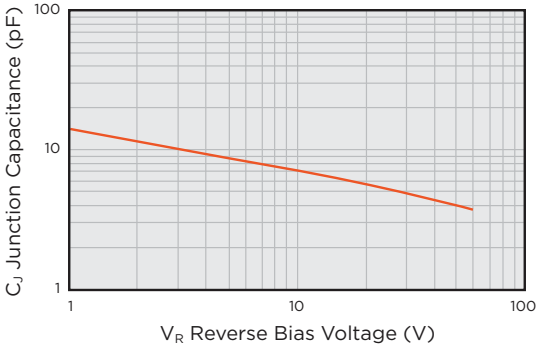


Fig.3 Typical Reverse Characteristics

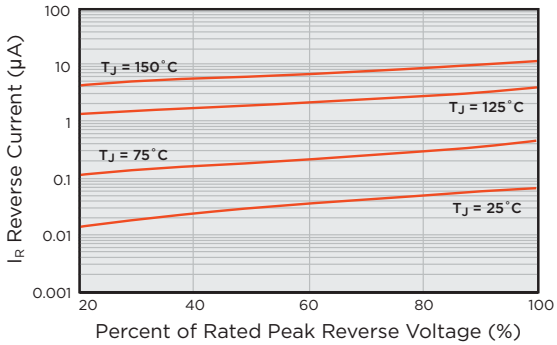
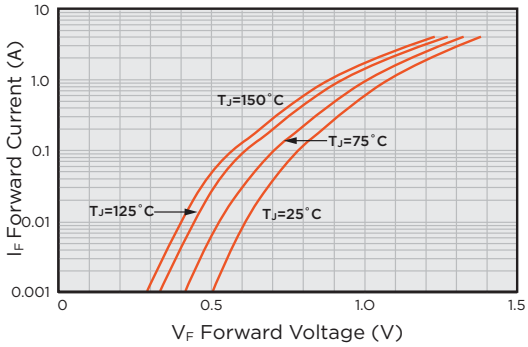
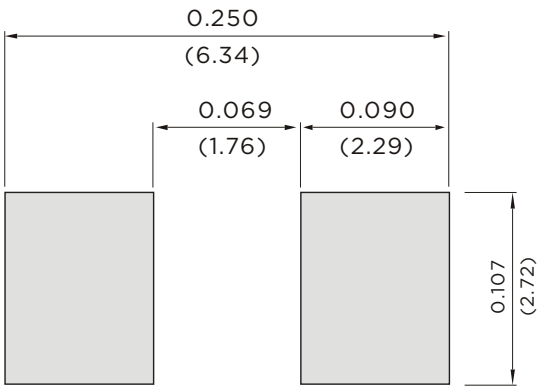


Fig.4 Typical Forward Characteristics



MOUNTING PAD LAYOUT

Units: inch (mm)