

MURB3JG

Surface Mount Super Fast Recovery Rectifier

Voltage

600 V

Current

3 A

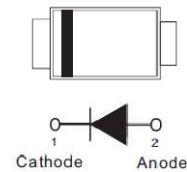
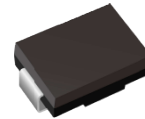
Features

- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Low leakage
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SMB Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0032 ounces, 0.092 grams

SMB



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive 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 Current	I _{F(AV)}	3	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	100	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V	C _J	28	pF
Typical Thermal Resistance ^(Note 1)	R _{θJA}	135	°C/W
	R _{θJC}	21	
Operating Junction Temperature Range	T _J	-55~175	°C
Storage Temperature Range	T _{STG}	-55~175	°C



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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.92	-	V
		$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	1.03	-	
		$I_F = 3\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.25	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.74	-	
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	0.84	-	
		$I_F = 3\text{ A}, T_J = 125^\circ\text{C}$	-	0.92	-	
Reverse Current	I_R	$V_R = V_{RRM}, T_J = 25^\circ\text{C}$	-	-	5	uA
		$V_R = V_{RRM}, T_J = 125^\circ\text{C}$	-	8	-	
Reverse Recovery Time ^(Note 2)	T_{RR}	---	-	-	50	ns

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, standard footprint
2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1\text{A}$ $I_{rr}=0.25\text{A}$



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TYPICAL CHARACTERISTIC CURVES

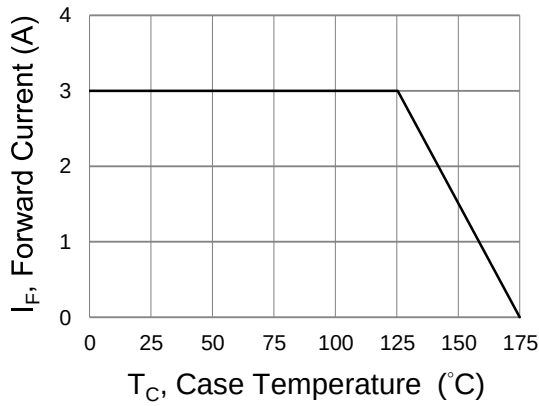


Fig.1 Forward Current Derating Curve

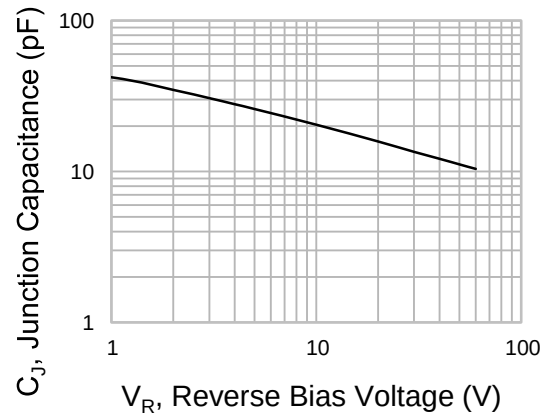


Fig.2 Typical Junction Capacitance

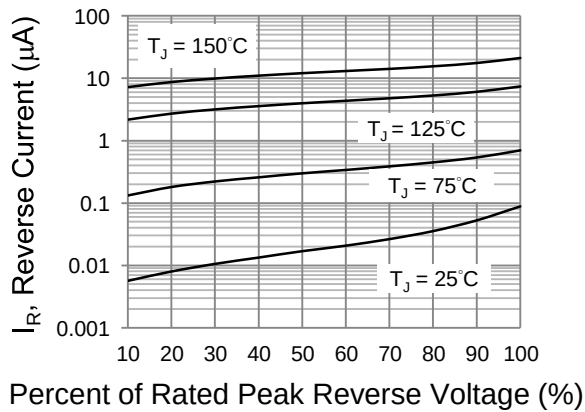


Fig.3 Typical Reverse Characteristics

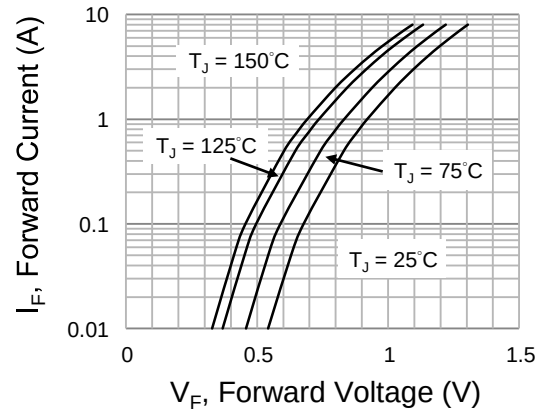


Fig.4 Typical Forward Characteristics

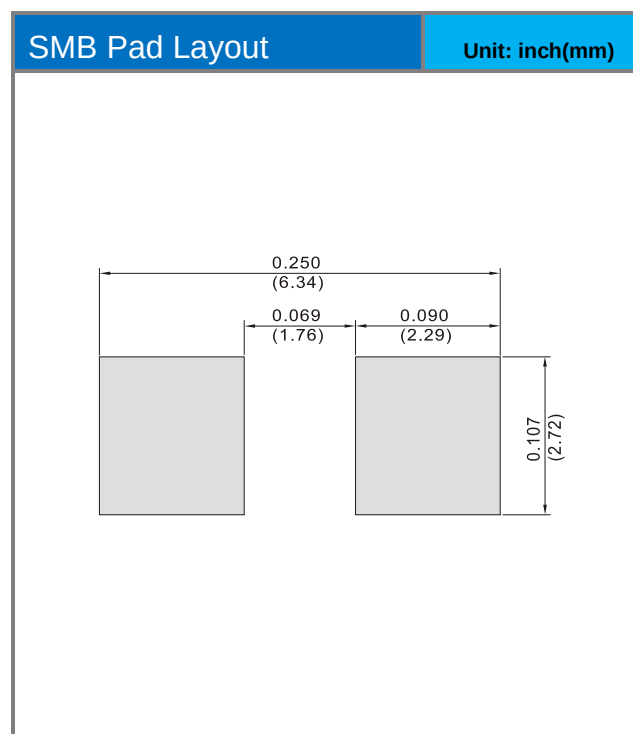
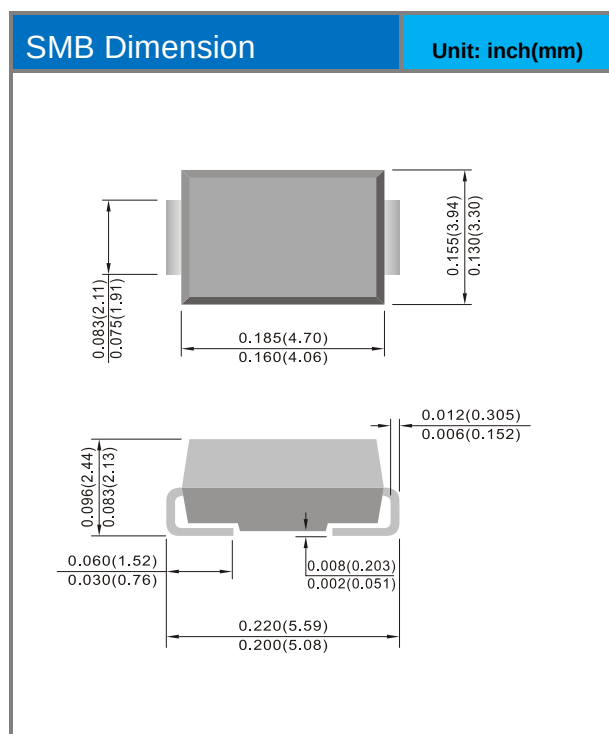


MURB3JG

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
MURB3JG_R1_00001	SMB	0.8K pcs / 7" reel	MUB3JG	Halogen free

Packaging Information & Mounting Pad Layout





MURB3JG

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