

MURB3J / MURC3J / MUR360M

SUPERFAST RECOVERY RECTIFIERS

Voltage

600 V

Current

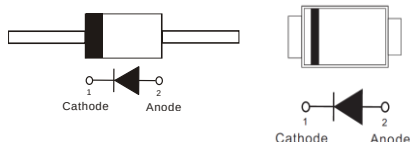
3 A

Features

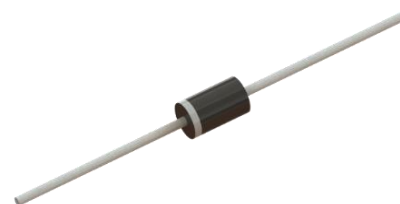
- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Hermetically sealed.
- Low leakage
- High surge capacity
- Plastic package has Underwriters Laboratory
Flammability Classification 94V-O utilizing
Flame Retardant Epoxy Molding Compound
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard (SMB, SMC)

Mechanical Data

- Case: Molded plastic, SMB, SMC, DO-201AD
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- SMB Approx. Weight: 0.0032 ounces, 0.092 grams
- SMC Approx. Weight: 0.0082 ounces, 0.2325 grams
- DO-201AD Approx. Weight: 0.04 ounces, 1.142 grams
- Marking: Part number



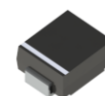
MUR360M DO-201AD



MURB3J SMB



MURC3J SMC



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

PARAMETER	SYMBOL	LIMIT	UNIT
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	$I_{F(AV)}$	3	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	70 80 80	A
Maximum forward voltage at 3A	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	$^{\circ}\text{C}$

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

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum reverse recovery time	(Note 4)	T_{RR}	50	ns
Typical thermal resistance	SMB(Note 3)	$R_{\theta JA}$	135	$^{\circ}\text{C/W}$
	SMC(Note 3)	$R_{\theta JA}$	125	
	SMB(Note 1)	$R_{\theta JC}$	20	
	SMC(Note 1)	$R_{\theta JC}$	14	
	DO-201AD(Note 2)	$R_{\theta JL}$	24	

Note:1. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area

2. The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two $10\text{cm} \times 10\text{cm} \times 0.5\text{mm}$ copper pad

3. Mounted on a FR4 PCB, single-sided copper, mini pad

4. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=-1\text{A}$, Recover to -0.25A

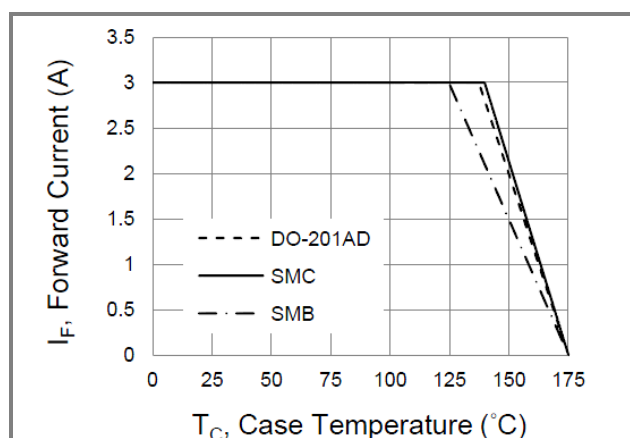


Fig.1 Forward Current Derating Curve

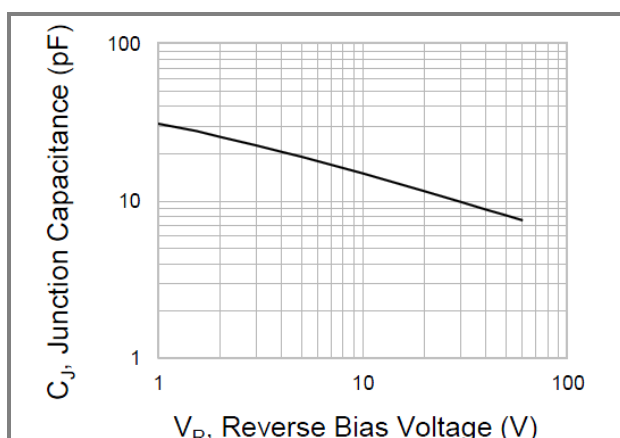


Fig.2 Typical Junction Capacitance

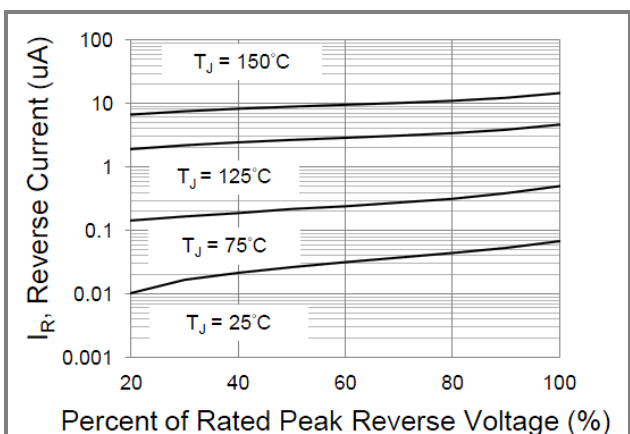


Fig.3 Typical Reverse Characteristics

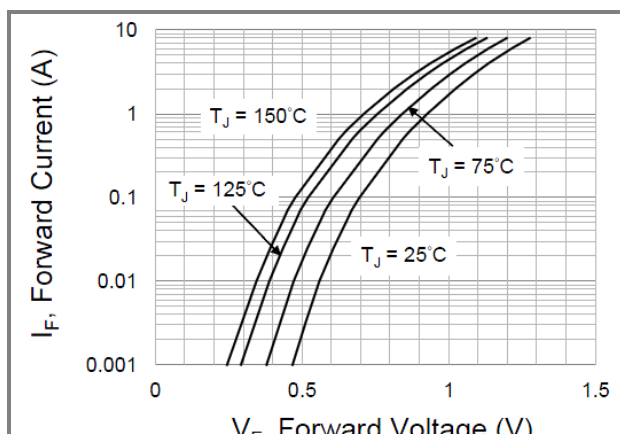


Fig.4 Typical Forward Characteristics

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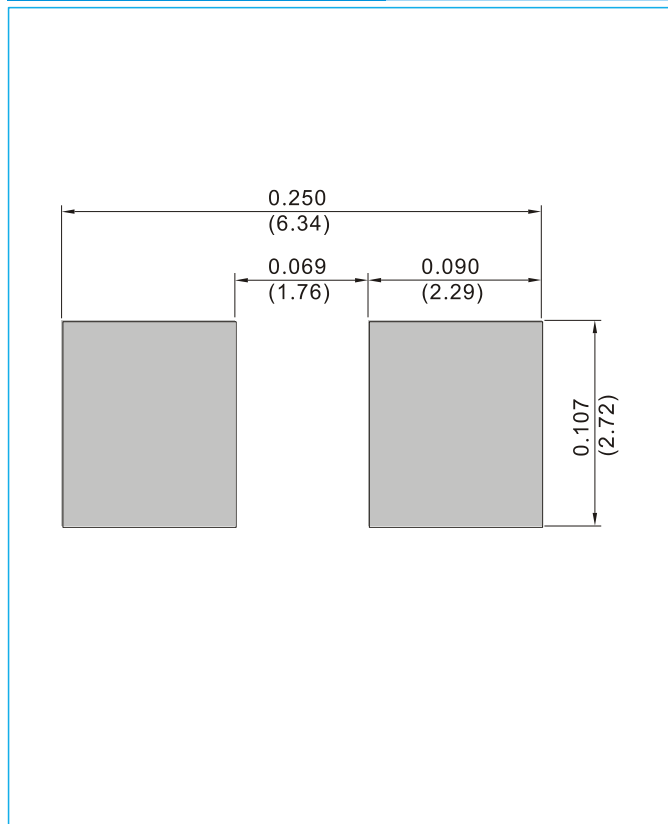
PART NO PACKING CODE VERSION

PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR360M_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR360M	Halogen free
MUR360M_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR360M	RoHS
MURB3J_R1_00001	SMB	0.8K pcs / 7" reel	MURB3J	Halogen free
MURC3J_R1_00001	SMC	0.8K pcs / 7" reel	MURC3J	Halogen free

MOUNTING PAD LAYOUT

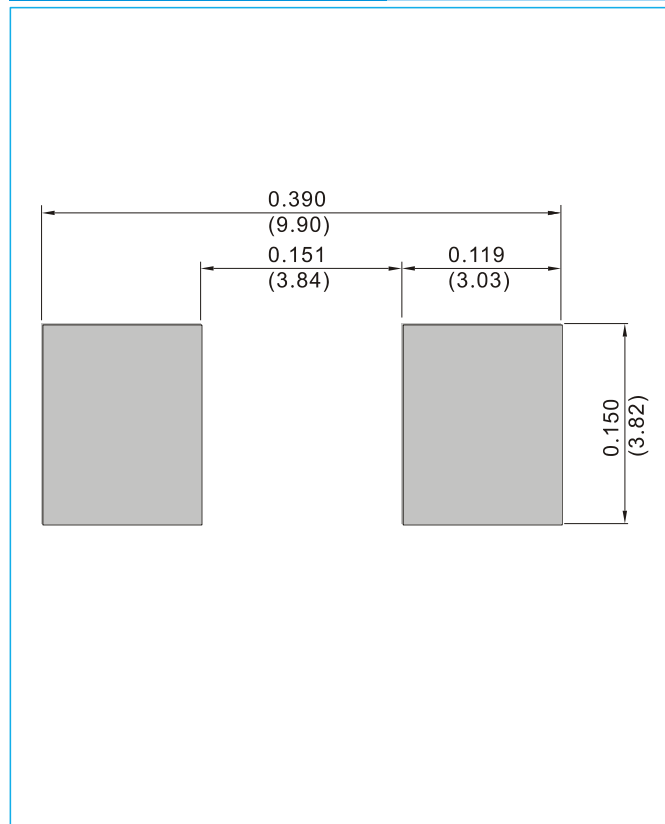
SMB / DO-214AA

Unit : inch(mm)



SMC / DO-214AB

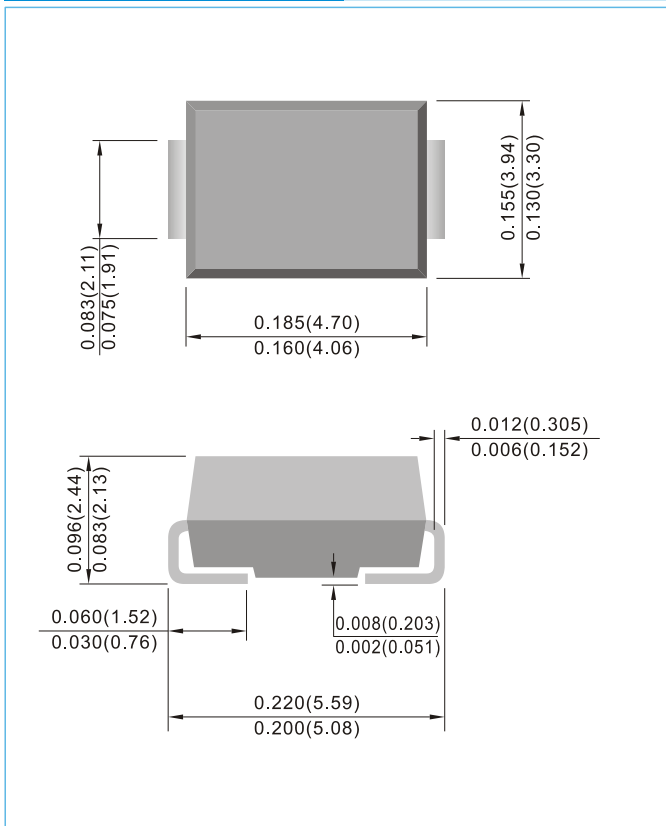
Unit : inch(mm)



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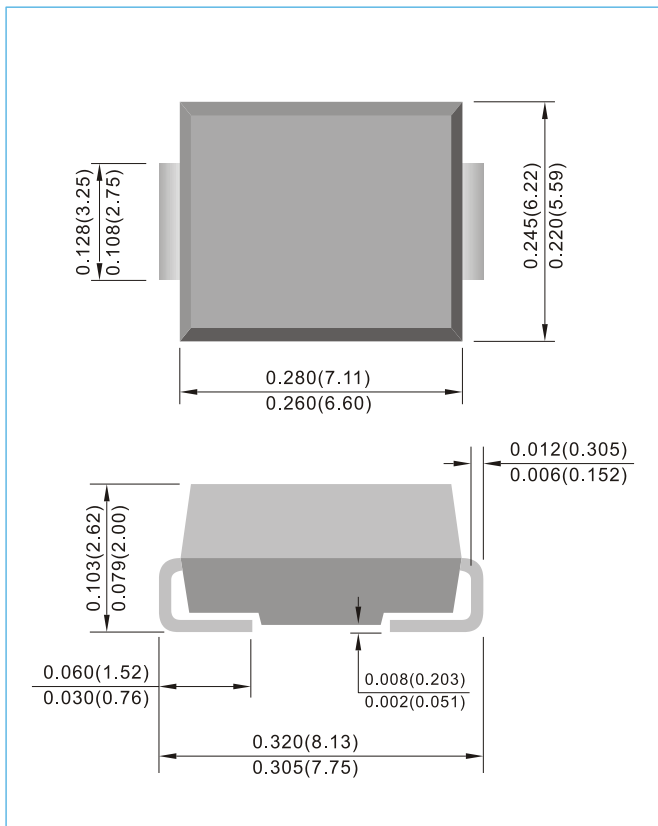
SMB / DO-214AA

Unit : inch(mm)



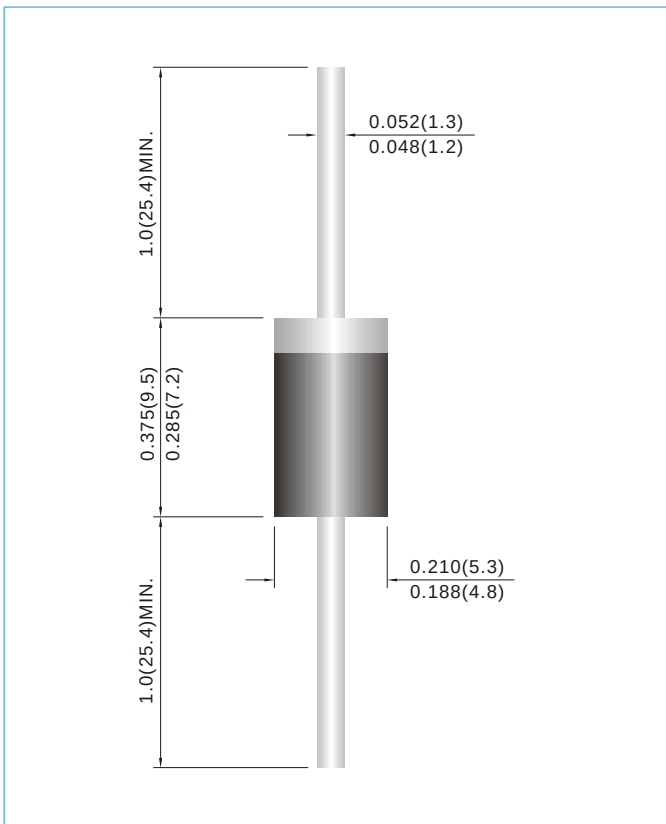
SMC / DO-214AB

Unit : inch(mm)



DO-201AD

Unit : inch(mm)





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