MURC5J / MUR560M / MUR560S

SUPERFAST RECOVERY RECTIFIERS

Voltage	600 V	Current	5 A

MUR560M DO-201AD

MURC5J SMC

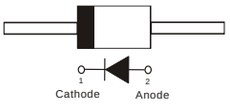
MUR560S TO-252

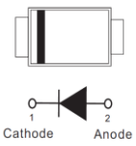
Features

- Silicon epitaxial high-speed diodes
- Soft recovery characteristics
- Low forward voltage, high current capability
- Hermetically sealed.
- Low leakage
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: Molded plastic, SMC, DO-201AD, TO-252
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- SMC Approx. Weight: 0.0082 ounces, 0.2325 grams
- DO-201AD Approx. Weight: 0.04 ounces, 1.142 grams
- TO-252 Weight: 0.0104 ounces, 0.297 grams
- Marking: Part number





Maximum Ratings (T_A=25°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		$I_{F(AV)}$	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	SMC DO-201AD TO-252	I_{FSM}	110 110 80	A
Maximum forward voltage at 5A		V_F	1.3	V
Maximum dc reverse current at rated dc blocking voltage		I_R	5	μA
Maximum reverse recovery time	(Note 5)	T_{RR}	50	ns
Typical thermal resistance	SMC(Note 3) SMC(Note 1) DO-201AD(Note 2) TO-252(Note 4)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JC}$	125 14 24 6.5	°C/W
Operating and storage temperature range		T_J, T_{STG}	-55 to +175	°C

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 10cm x 10cm × 0.5mm copper pad

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

4. Mounted on 10cm x 10cm x 1mm copper pad area

5. Reverse Recovery Test Conditions : I_F=0.5A, I_R=1A, Recover to 0.25A

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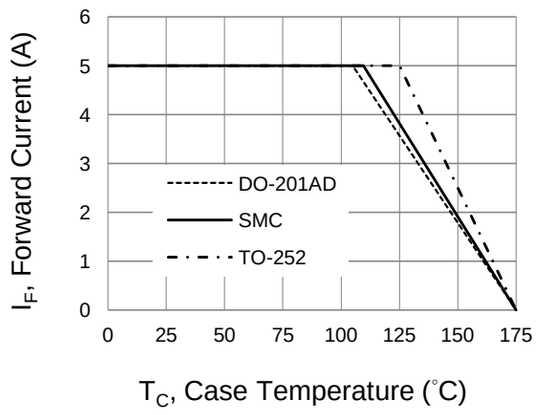

Fig.1 Forward Current Derating Curve

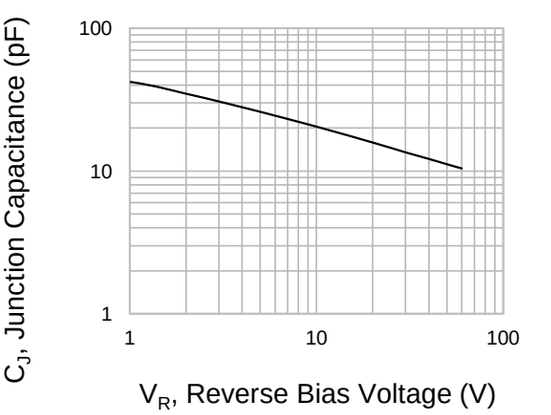

Fig.2 Typical Junction Capacitance

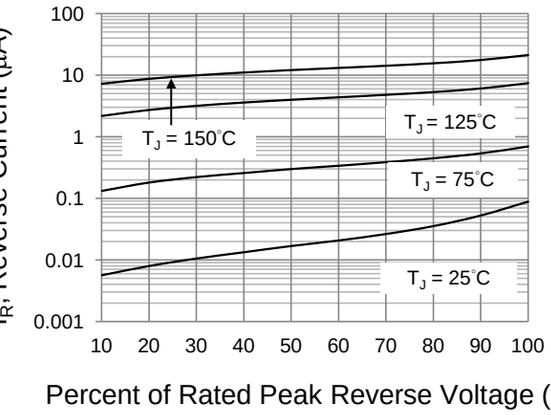

Fig.3 Typical Reverse Characteristics

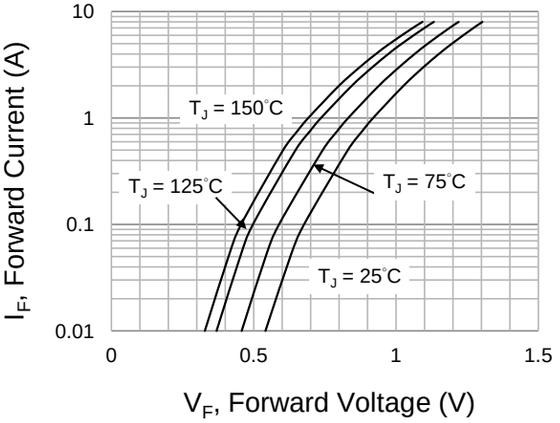

Fig.4 Typical Forward Characteristics

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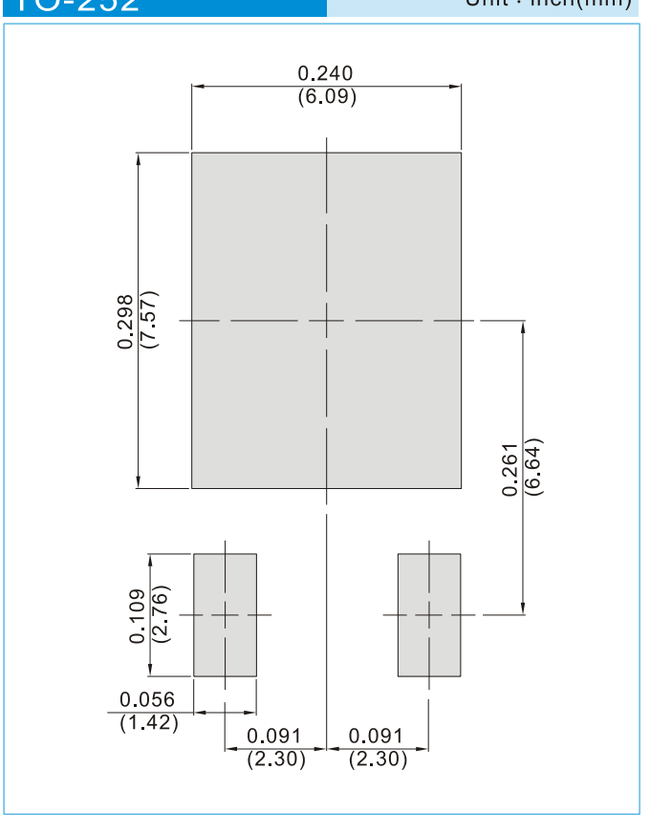
PART NO PACKING CODE VERSION

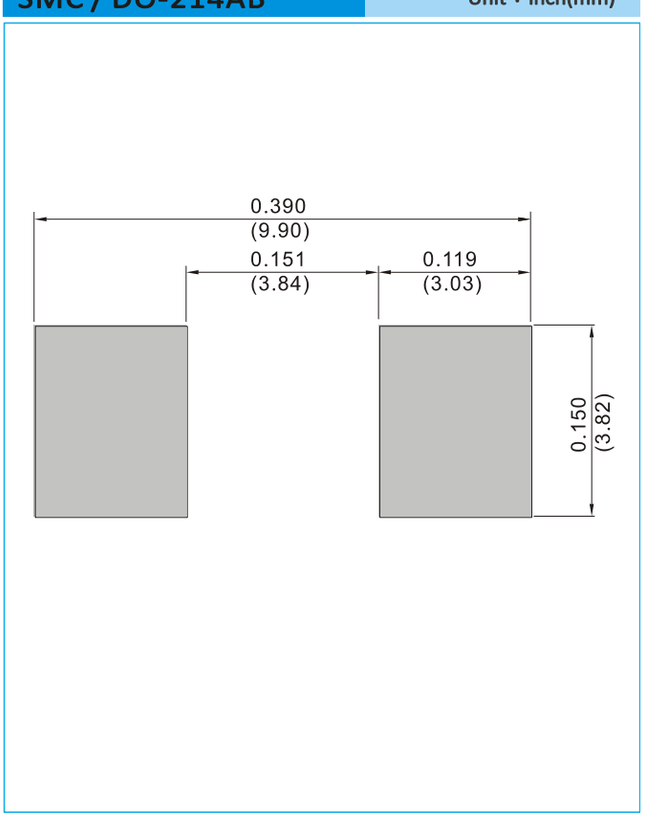
PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR560M_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR560M	Halogen free
MUR560S_L2_00001	TO-252	3K pcs / 13" rel	MUR560S	Halogen free
MURC5J_R1_00001	SMC	0.8K pcs / 7" reel	MURC5J	Halogen free

MOUNTING PAD LAYOUT

TO-252 Unit : inch(mm)



SMC / DO-214AB Unit : inch(mm)



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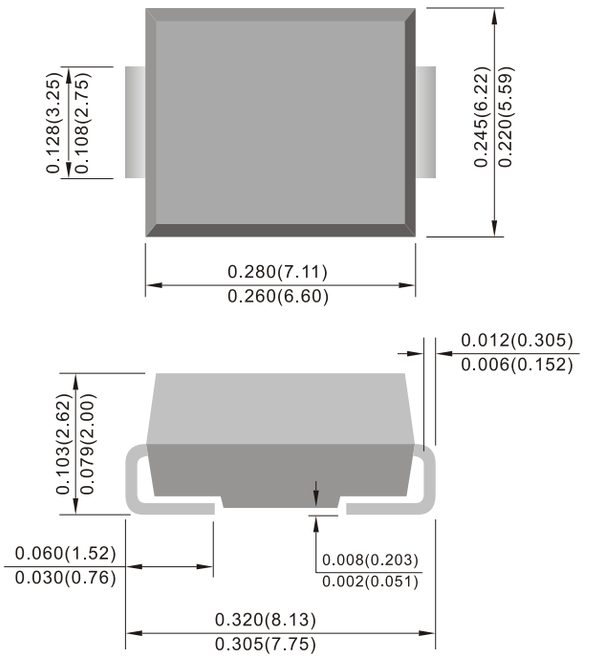
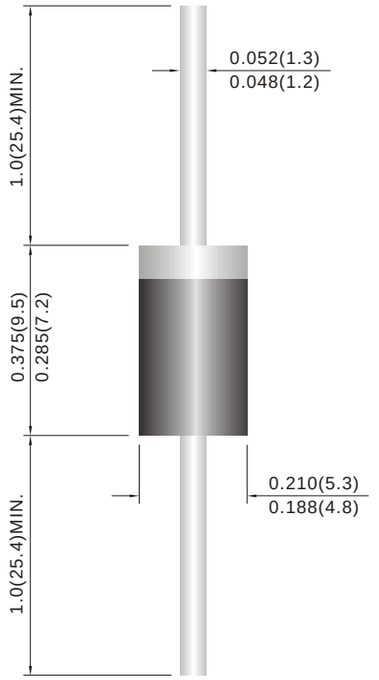
SMC / DO-214AB

Unit : inch(mm)



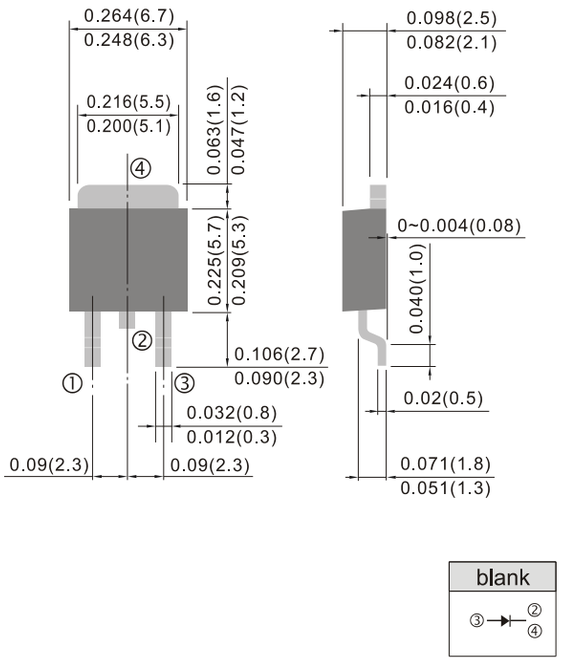
DO-201AD

Unit : inch(mm)



TO-252

Unit : inch(mm)



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