



# MURC4J / MUR460M

## SUPERFAST RECOVERY RECTIFIERS

**Voltage**

**600 V**

**Current**

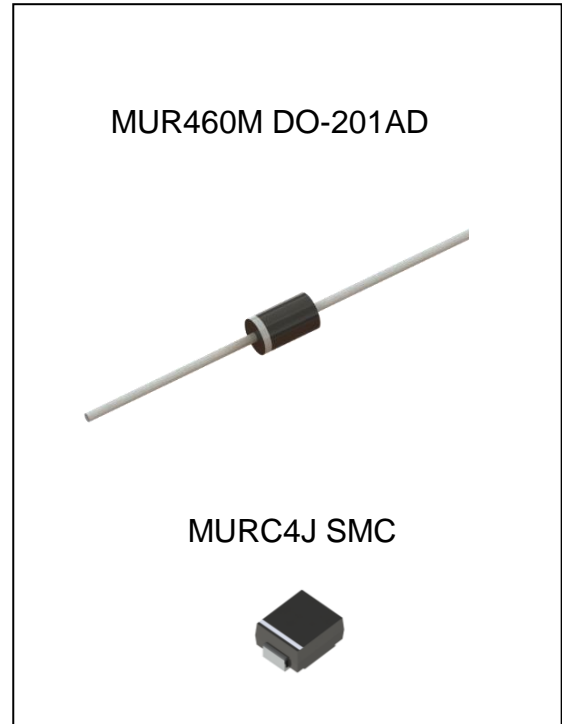
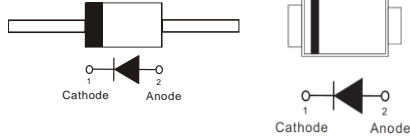
**4 A**

### 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
- 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
- Marking: Part number



### 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	$I_{F(AV)}$	4	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	110	A
Maximum forward voltage at 4A	$V_F$	1.28	V
Maximum dc reverse current at rated dc blocking voltage	$I_R$	5	$\mu\text{A}$
Maximum reverse recovery time	(Note 4)	$T_{RR}$	50 ns
Typical thermal resistance	SMC(Note 3)	$R_{\theta JA}$	125
	SMC(Note 1)	$R_{\theta JC}$	14
	DO-201AD(Note 2)	$R_{\theta JL}$	24
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +175	$^{\circ}\text{C}$

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

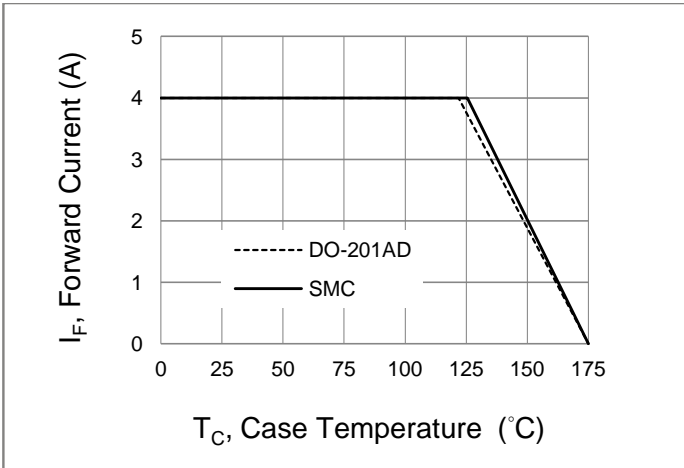
2. The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm x 0.5mm copper pad

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

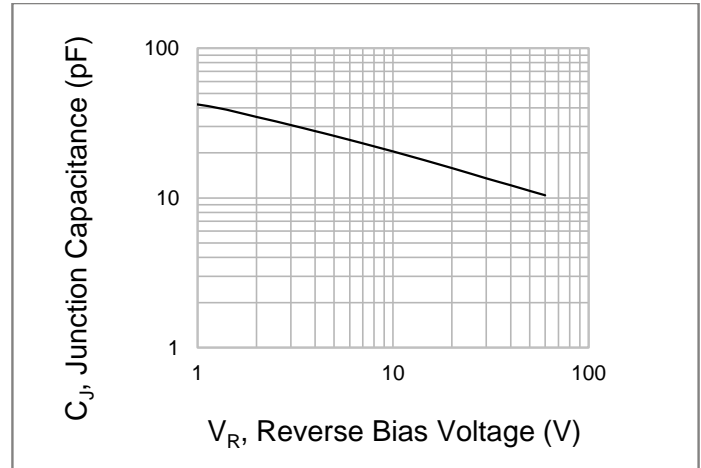
4. Reverse Recovery Test Conditions :  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ , Recover to 0.25A



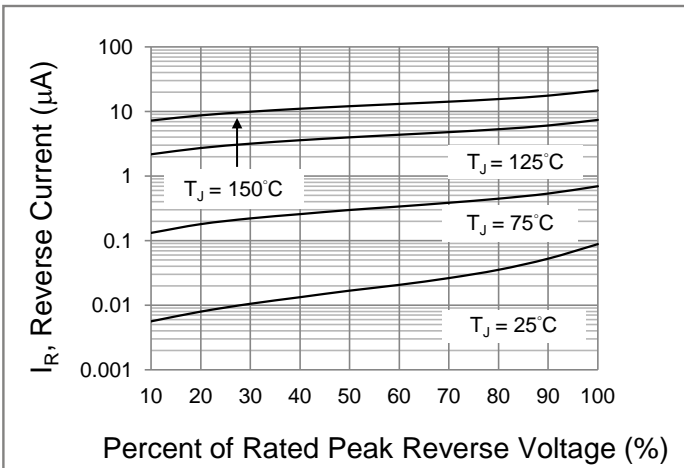
# MURC4J / MUR460M



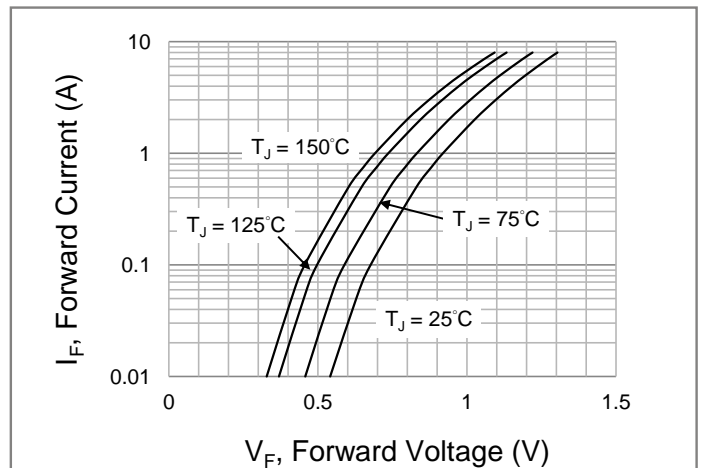
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

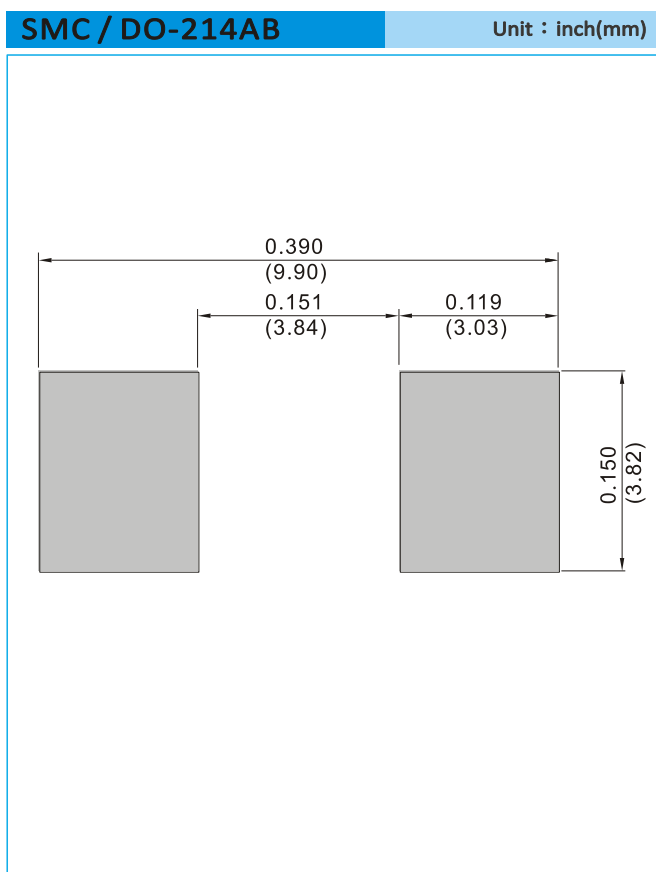


# MURC4J / MUR460M

## PART NO PACKING CODE VERSION

PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR460M_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR460M	Halogen free
MURC4J_R1_00001	SMC	0.8K pcs / 7" reel	MURC4J	Halogen free

## MOUNTING PAD LAYOUT

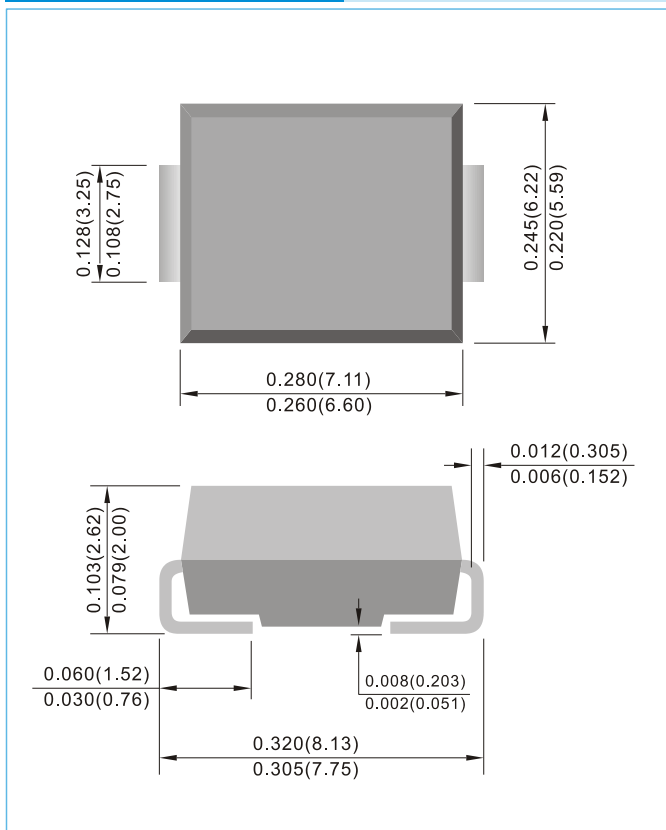




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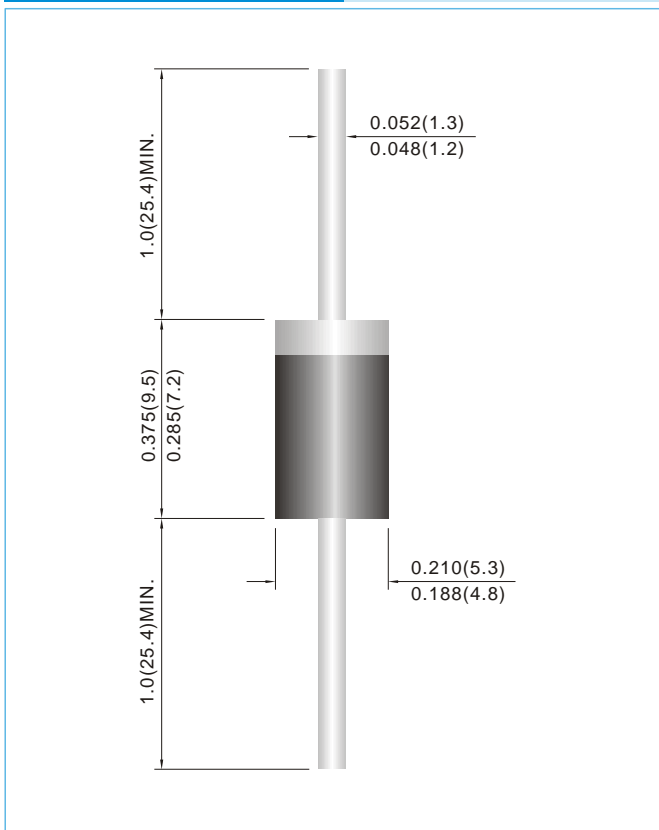
## SMC / DO-214AB

Unit : inch(mm)



## DO-201AD

Unit : inch(mm)





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