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

MUR460M DO-201AD

MURC4J SMC
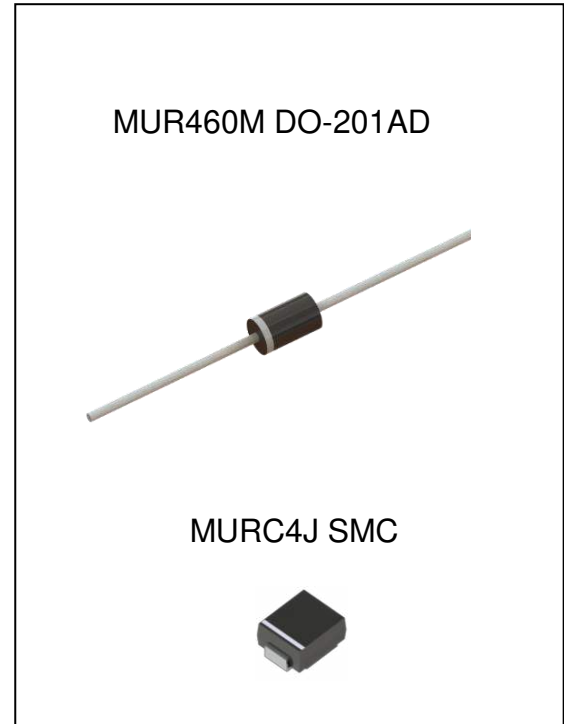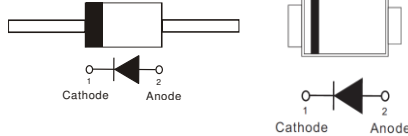
Maximum Ratings (T_A=25°C unless otherwise noted)

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		$I_{F(AV)}$	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	µA
Maximum reverse recovery time	(Note 4)	T_{RR}	50	ns
Typical thermal resistance	SMC(Note 3)	$R_{\theta JA}$	125	^{o}C/W
	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	^{o}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. Reverse Recovery Test Conditions : IF=0.5A, IR=1A, Recover to 0.25A
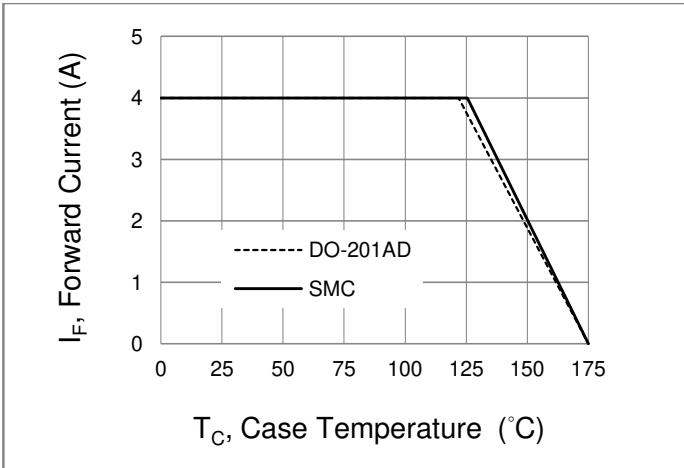
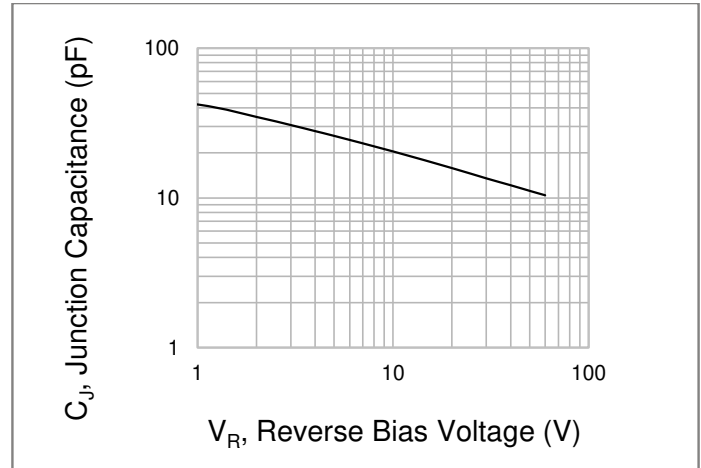**Fig.1 Forward Current Derating Curve**

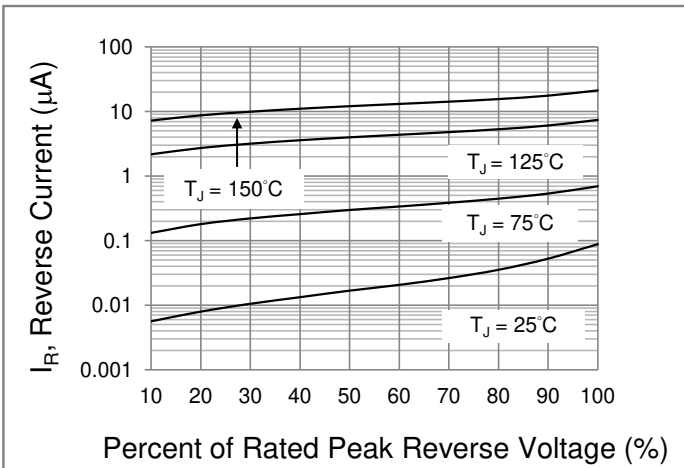**Fig.2 Typical Junction Capacitance**

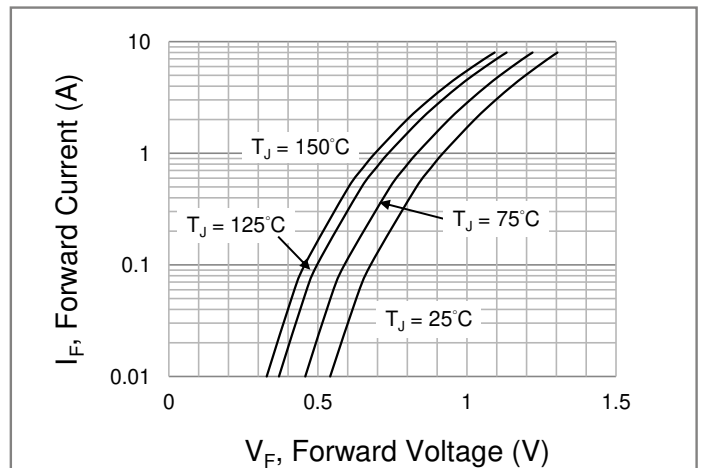**Fig.3 Typical Reverse Characteristics**

Fig.4 Typical Forward Characteristics

MURC4J / MUR460M

PART NO PACKING CODE VERSION

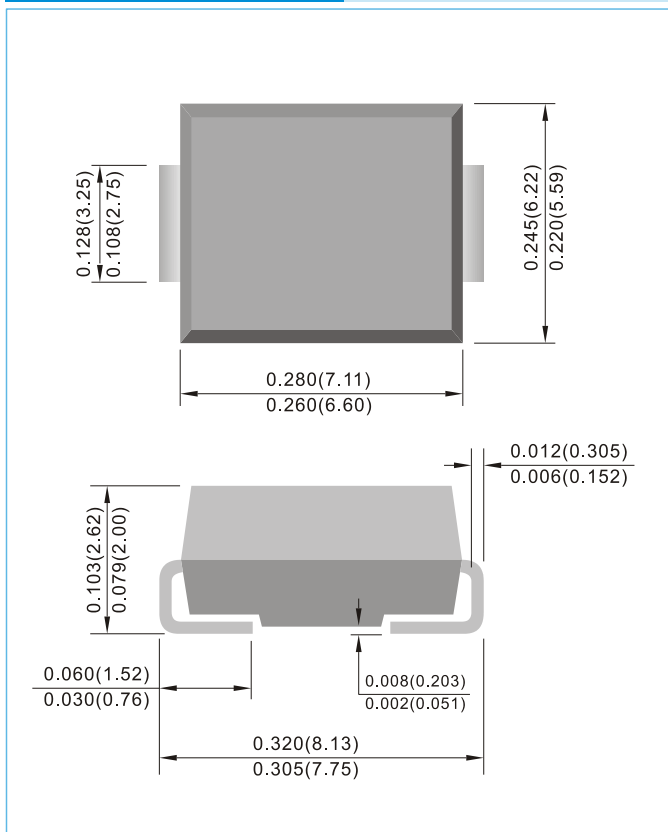| PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR460M_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR460M	Halogen free
MURC4J_R1_00001	SMC	0.8K pcs / 7" reel	MURC4J	Halogen free

MOUNTING PAD LAYOUT

SMC / DO-214AB　　　　Unit：inch(mm)

0.390
(9.90)

0.151
(3.84)

0.119
(3.03)

0.150
(3.82)

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

0.128(3.25)
0.108(2.75)

0.245(6.22)
0.220(5.59)

0.280(7.11)
0.260(6.60)

0.012(0.305)
0.006(0.152)

0.103(2.62)
0.079(2.00)

0.060(1.52)
0.030(0.76)

0.008(0.203)
0.002(0.051)

0.320(8.13)
0.305(7.75)

DO-201AD
Unit : inch(mm)

0.052(1.3)
0.048(1.2)

1.0(25.4)MIN.

0.375(9.5)
0.285(7.2)

1.0(25.4)MIN.

0.210(5.3)
0.188(4.8)

Disclaimer