



### SUPERFAST RECOVERY RECTIFIERS

Voltage

600 V

Current

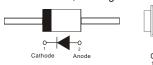
4 A

#### **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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### 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<sub>A</sub>=25°C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage		Vrrm	600	V
Maximum rms voltage		VRMS	420	V
Maximum dc blocking voltage		VR	600	V
Maximum average forward current		<b>I</b> F(AV)	4	Α
Peak forward surge current: 8.3ms single half sine- wave superimposed on rated load		IFSM	80	А
Typical forward voltage at 4A		VF	1.28	V
Maximum dc reverse current at rated dc blocking voltage		lr	5	μА
Maximum reverse recovery time	(Note 4)	T <sub>RR</sub>	50	ns
Typical thermal resistance	SMC(Note 3)	$R_{\theta JA}$	125	
	SMC(Note 1)	$R_{ heta JC}$	14	°C/W
	DO-201AD(Note 2)	$R_{ heta JL}$	24	
Operating and storage temperature range		TJ, Tsтg	-55 to +175	°C

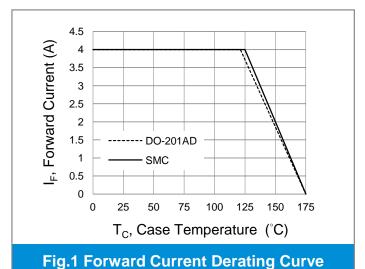
Note: 1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area

- 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: IF=0.5A, IR=1A, IRR=0.25A

September 9,2015-REV.01 Page 1



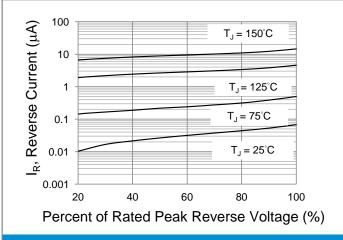




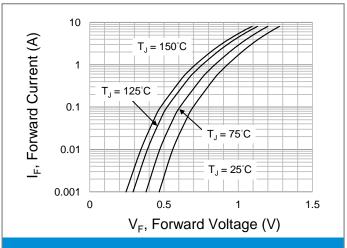
C<sub>J</sub>, Junction Capacitance (pF) 10 100 V<sub>R</sub>, Reverse Bias Voltage (V)

**Fig.2 Typical Junction Capacitance** 

100







**Fig.4 Typical Forward Characteristics** 

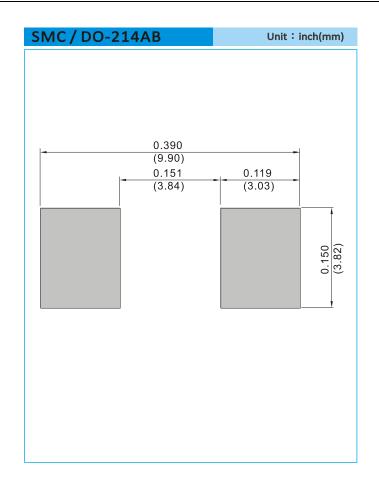




### PART NO PACKING CODE VERSION

PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR460IM_AY_00001	DO-201AD	1.25K pcs / TB 52mm	MUR460IM	Halogen free
MURC4JI_R1_00001	SMC	0.5K pcs / 7" reel	MURC4JI	Halogen free

### **MOUNTING PAD LAYOUT**



September 9,2015-REV.01 Page 3





#### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to
  human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation
  equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so
  at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or
  sale.

September 9,2015-REV.01 Page 4