

### FEATURES

- Glass passivated junction
- For Surface Mount Applications, Easy to pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage
- High temperature soldering guaranteed:260°C/10 seconds at terminals,
- Component in accordance to RoHS 2015/863/EU



### SMC(DO-214AB)



Cathode  $\leftarrow$   $\rightarrow$  Anode

### MECHANICAL DATA

- Case: JEDEC SMC(DO-214AB) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.007ounce,0.21 gram

### TYPICAL APPLICATIONS

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,60Hz,resistive or inductive load. For capacitive load,derate current by 20%.)

Parameters	Symbols	MURS560C	Units
Maximum repetitive peak reverse voltage	VRRM	600	Volts
Maximum RMS voltage	VRMS	420	Volts
Maximum DC blocking voltage	VDC	600	Volts
Maximum average forward rectified current(see Fig.1)	I(AV)	5.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150	Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1 )	VF	1.28	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	IR	T <sub>j</sub> =25°C	2
		T <sub>j</sub> =125°C	50
Maximum Reverse Recovery Time (Note 2)	trr	60	ns
Typical Thermal Resistance(Note3)	R <sub>θJA</sub>	47	°C/W
	R <sub>θJL</sub>	11	
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

Note: 1.Test conditions: I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RM</sub>=0.25A.

2.Measured at 1MHZ and applied reverse voltage of 4.0 Volts.

3.Units mounted on PCB with 0.31" x 0.31" (8.0 mm x 8.0 mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES MURS560C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

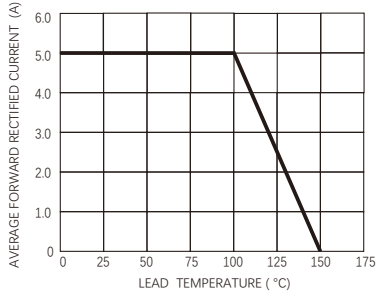


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

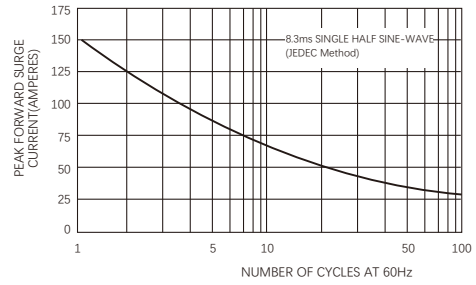


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

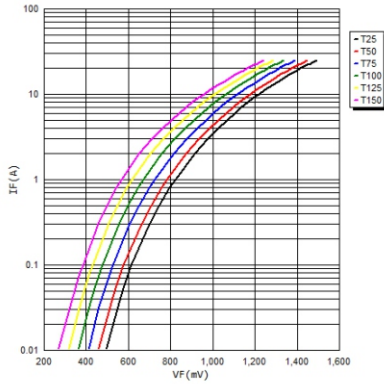
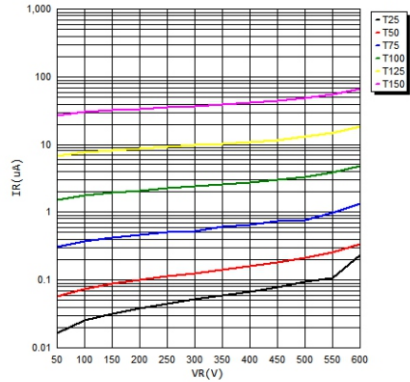


FIG.4-TYPICAL REVERSE CHARACTERISTICS

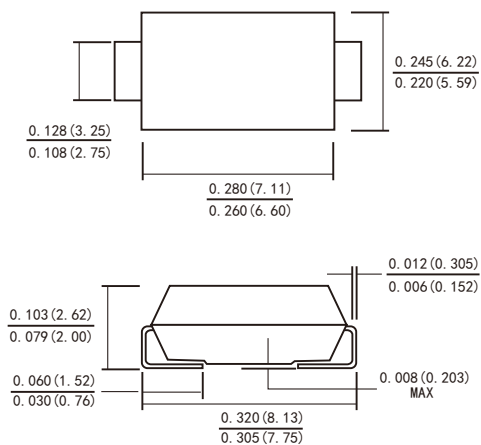


## AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Box Size L×W×H (mm)	Quantity (reel/box)	Carton Size L×W×H (mm)	Quantity (box/carton)	Quantity (carton) (K)
MURS560C-SMC	T/R	Φ330	3000	338×338×39	2	370×370×360	8	48

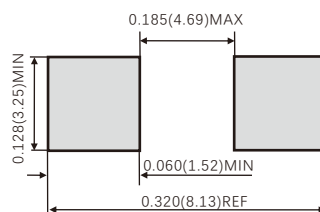
## PACKAGE OUTLINE DIMENSIONS

### SMC(DO-214AB)



Dimensions in inches and (millimeters)

### Suggested PAD Layout



## Friendship Reminder

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