

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	MURS4100C	Units
Maximum repetitive peak reverse voltage	V_{RRM}	1000	Volts
Maximum RMS voltage	V_{RMS}	700	Volts
Maximum DC blocking voltage	V_{DC}	1000	Volts
Maximum average forward rectified current(see Fig.1)	I_{AV}	4.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125	Amps
Maximum instantaneous forward voltage at 4.0 A(Note 1)	V_F	1.70	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_J=25^{\circ}C$	2	μA
	$T_J=125^{\circ}C$	100	
Maximum Reverse Recovery Time (Note 2)	t_{rr}	75	ns
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	47	$^{\circ}C/W$
	$R_{\theta JL}$	12	
Operating junction temperature range	T_J	-55 to+150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150	$^{\circ}C$

Note: 1.Test conditions: $I_F=0.5A,I_R=1.0A,I_{RM}=0.25A$.

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 MURS4100C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

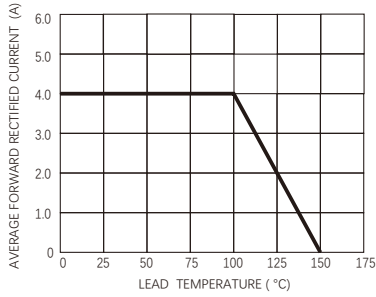


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

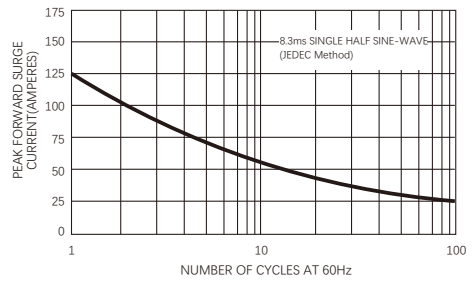


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

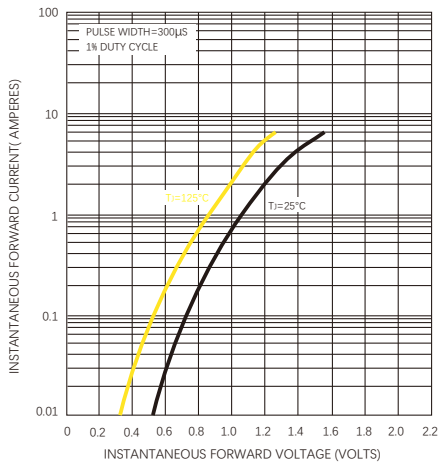
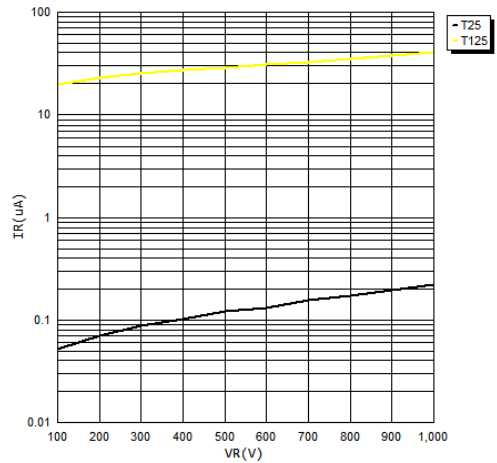


FIG.4-TYPICAL REVERSE CHARACTERISTICS

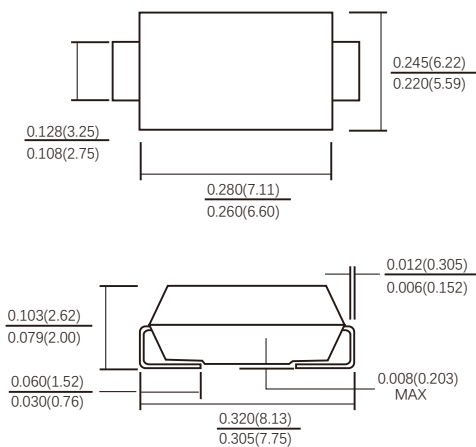


AVAILABLE PACK INFORMATION

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)
MURS4100C-SMC	T/R	Φ330	3000	338×338×39	2	370×370×360	8	48

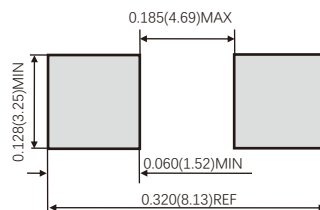
PACKAGE OUTLINE DIMENSIONS

SMC(DO-214AB)



Dimensions in inches and (millimeters)

Suggested PAD Layout



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