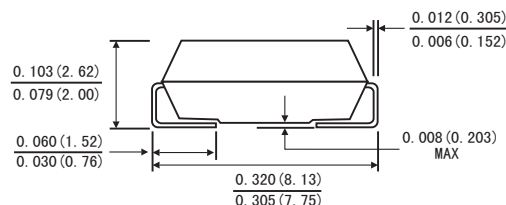
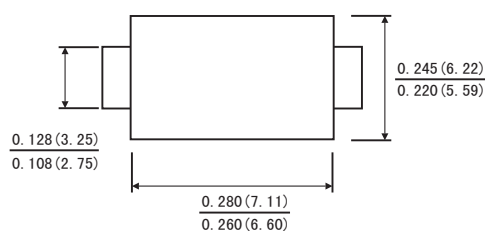


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



SMC(DO-214AB)



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SS525C				Units
Maximum repetitive peak reverse voltage	V_{RRM}	250				Volts
Maximum RMS voltage	V_{RMS}	175				Volts
Maximum DC blocking voltage	V_{DC}	250				Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{(AV)}$	5.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T_J)	I_{FSM}	150.0				Amps
Forward voltage at 5.0 A(Note 1)	V_F	YTP.	0.83	MAX.	0.91	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I_R	$T_A=25^\circ C$	20			μA
		$T_A=125^\circ C$	3			mA
Typical junction capacitance(Note 3)	C_J	400				pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55.0				$^\circ C/W$
	$R_{\theta JL}$	17.0				
Operating junction temperature range	T_J	-55 to+150				$^\circ C$
Storage temperature range	T_{STG}	-55 to+150				$^\circ C$

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

3.Measured at 1MHz and reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES SS525C

FIG.1-FORWARD CURRENT DERATING CURVE

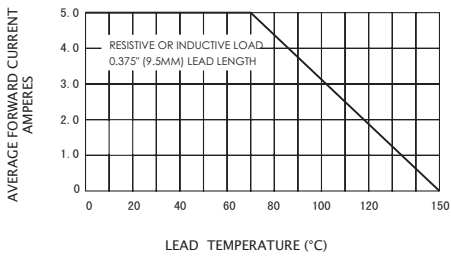


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

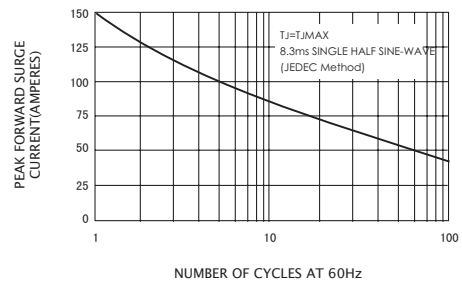


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

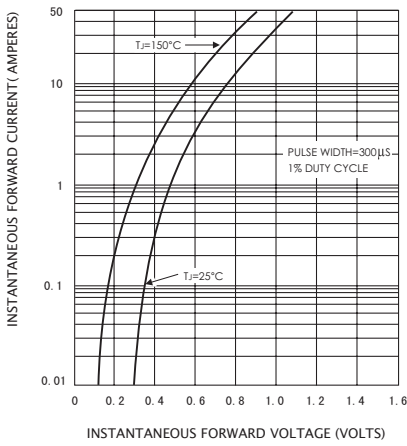


FIG.4-TYPICAL REVERSE CHARACTERISTICS

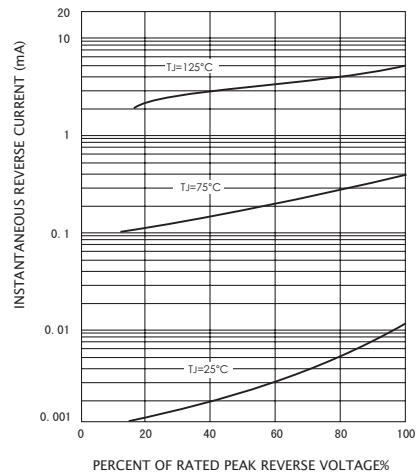


FIG.5-TYPICAL JUNCTION CAPACITANCE

