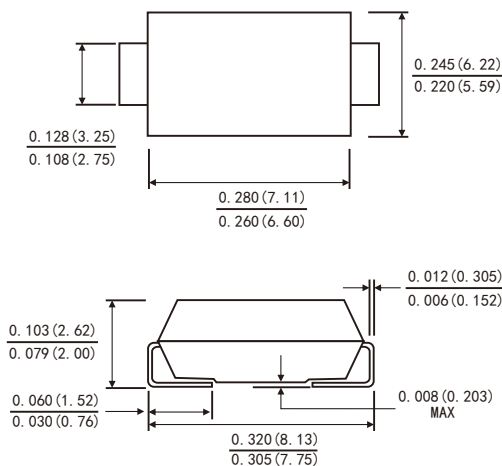


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- Built-in strain relief ,ideal for automated placement
- 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
- Weight: 0.007ounce,0.21 gram

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	SS 82	SS 84	SS 86	SS 88	SS 810	SS 815	SS 820	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS voltage		V _{RMS}	14	28	42	56	71	105	140	Volts
Maximum DC blocking voltage		V _{DC}	20	40	60	80	100	150	200	Volts
Maximum average forward rectified current (see fig.1)		I(AV)	8.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated Tj)		I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 8.0 A(Note 1)		V _F	0.55		0.70	0.85		0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	500				50			μA
	T _A =125°C		50				10			mA
Typical thermal resistance (Note 2)		R _{θJA} R _{θJL}	47.0 17.0							°C/W
Operating junction temperature range		T _J	-55 to+150							°C
Storage temperature range		T _{STG}	-55 to+150							°C

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

2. P.C.B. mounted 0.55X0.55"(14X14mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS82 THRU SS820

FIG.1-FORWARD CURRENT DERATING CURVE

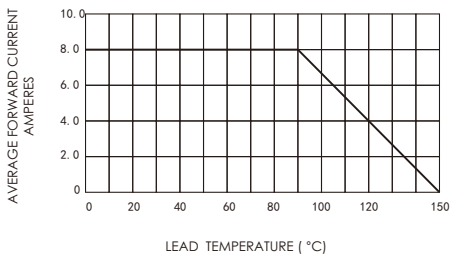


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

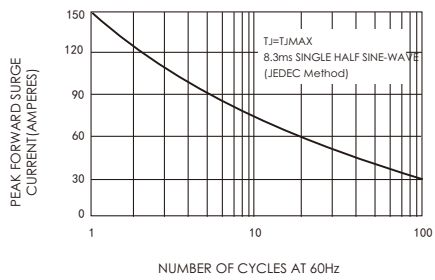


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

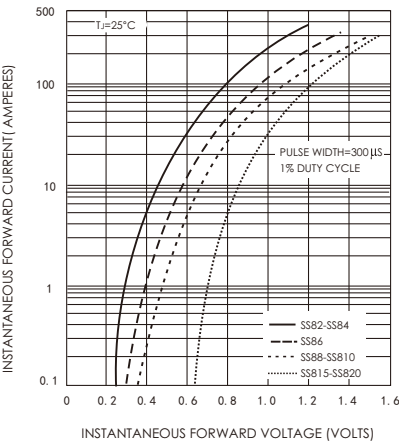


FIG.4-TYPICAL REVERSE CHARACTERISTICS

