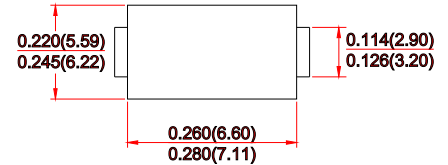


FEATURES

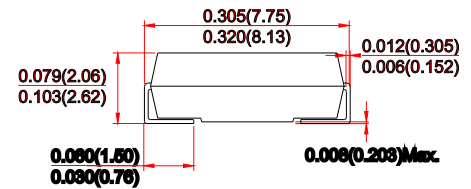
- Low profile package
- Low power losses, high efficiency
- Low forward voltage drop
- Guard ring for over voltage protection
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

SMC(DO-214AB)



MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-750 method 2026
- Mounting position: Surface Mounted
- Weight: 0.007 ounce, 0.25 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	SS315	SS320	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	200	Volts
Maximum RMS Voltage	V_{RMS}	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	150	200	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	3.0		Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120		Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V_F	0.92		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	0.2		mA
	$T_A = 125^\circ\text{C}$	5		
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	12		$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	55		$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150		$^\circ\text{C}$

Notes:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. P.C.B. Mounted with 0.55"× 0.55"(14×14mm) copper pads

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

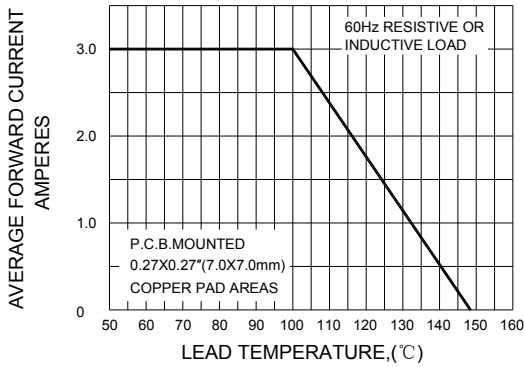


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

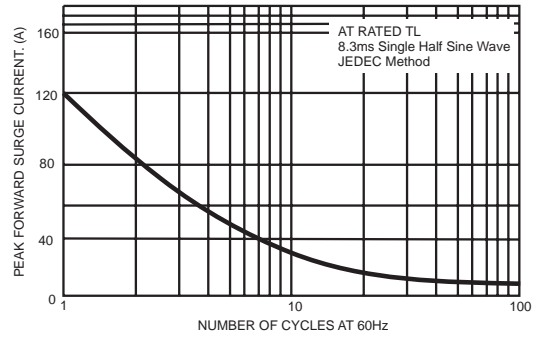


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

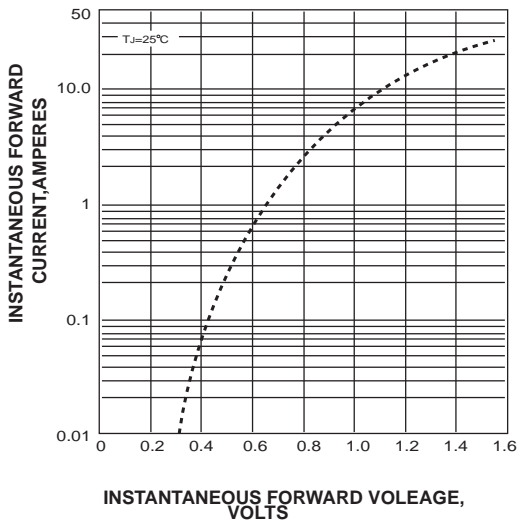


FIG.4-TYPICAL REVERSE CHARACTERISTICS

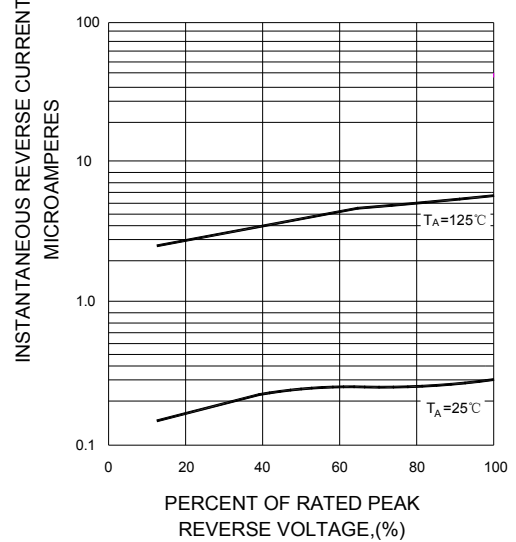


FIG.5-TYPICAL JUNCTION CAPACITANCE

