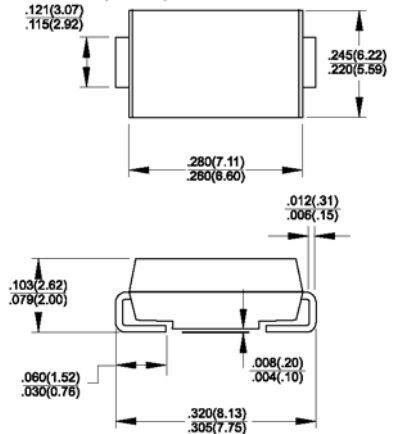


Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Glass passivated chip junction



DO-214AB (SMC)



Dimensions in inches and (millimeters)

Mechanical Data

- ◆ Case: JEDEC DO-214AB (SMC) molded plastic body over glass passivated chip
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
High temperature soldering: 260°C/10 seconds at terminals
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: 0.009 ounce, 0.25 gram



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	SN3A	SN3B	SN3D	SN3G	SN3J	SN3K	SN3M	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_A=103^{\circ}\text{C}$ ⁽¹⁾	$I_{F(AV)}$					3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_A=75^{\circ}\text{C}$	I_{FSM}					100.0			Amps
Maximum instantaneous forward voltage at 2.5A	V_F					1.15			Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^{\circ}\text{C}$ @ $T_A=125^{\circ}\text{C}$	I_R					10.0 250			μA
Typical reverse recovery time at $I_R=0.5\text{A}$, $I_F=1.0\text{A}$, $I_L=0.25\text{A}$	t_{rr}					1.0			μS
Typical junction capacitance at 4.0V, 1MHz	C_J					60			pF
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$					47 13			$^{\circ}\text{C}/\text{W}$
Operating junction temperature range	T_J					-55 to +150			$^{\circ}\text{C}$
Storage temperature range	T_{STG}					-55 to +150			$^{\circ}\text{C}$

Notes: 1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Forward Current Derating Curve

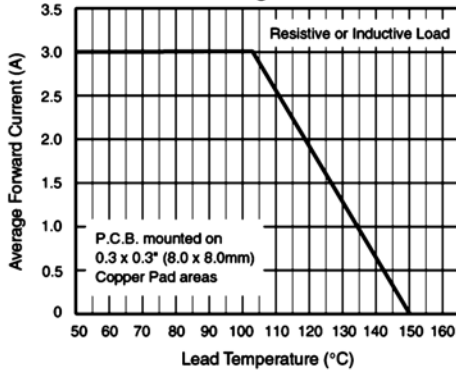


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

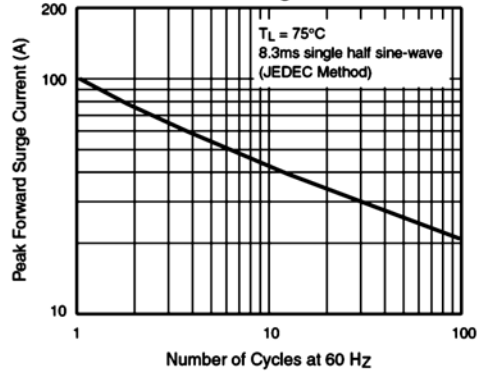


Fig. 3 - Typical Instantaneous Forward Characteristics

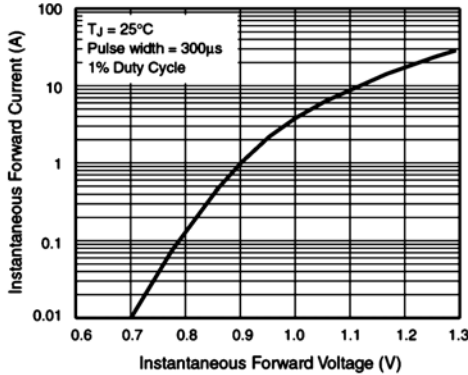


Fig. 4 - Typical Reverse Characteristics

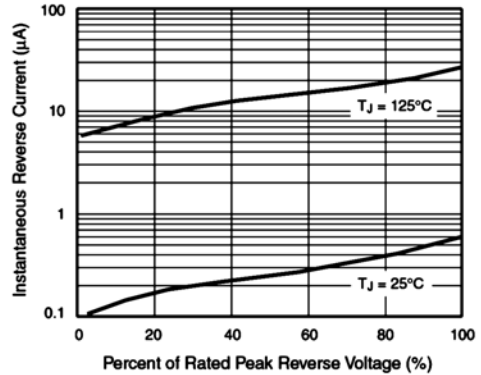


Fig. 5 - Typical Junction Capacitance

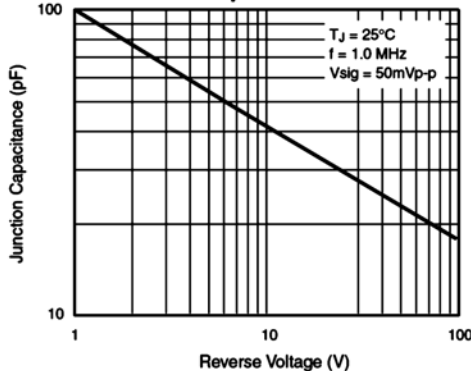


Fig. 6 - Typical Transient Thermal Impedance

