SS315- SS320

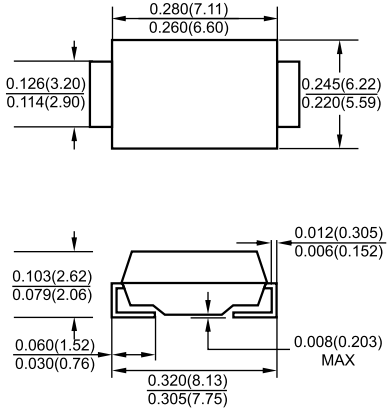
Surface Mount Schottky Barrier Rectifier

RoHS COMPLIANT

Reverse Voltage - 200 Volts

Forward Current - 3.0 Amperes

SMC/DO-214AB



Dimensions in inches and (millimeters)

Features

- ✧ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ✧ For surface mounted applications
- ✧ Metal silicon junction,majority carrier conduction Low
- ✧ power loss,high efficiency
- ✧ Built-in strain relief,ideal for automated placement
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

- ✧ Case: JEDEC DO-214ABmolded plastic body
- ✧ Terminals: leads solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Color band denotes cathode end
- ✧ Mounting Position: Any

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 current derate by 20%.

	SYMBOLS	SS315	SS320	UNITS
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 at T_L(see fig.1)	$I_{(AV)}$	3.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0		Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.84		Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	1.0 10		mA
Typical junction capacitance (NOTE 1)	C_J	300		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	62.0		°C/W
Operating junction temperature range	T_J,	-65 to +150		°C
Storage temperature range	T_{STG}	-65 to +150		°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS320

FIG. 1- FORWARD CURRENT DERATING CURVE

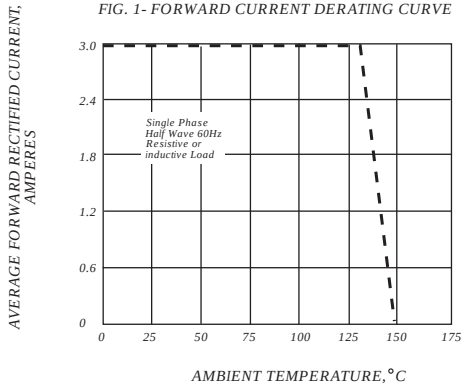


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

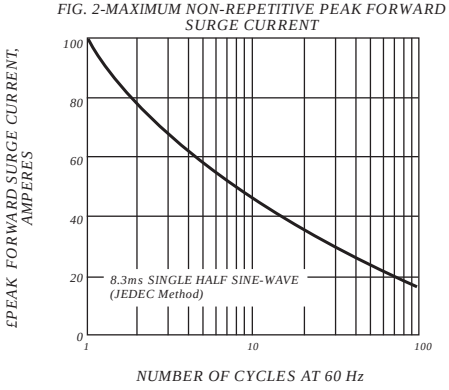


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

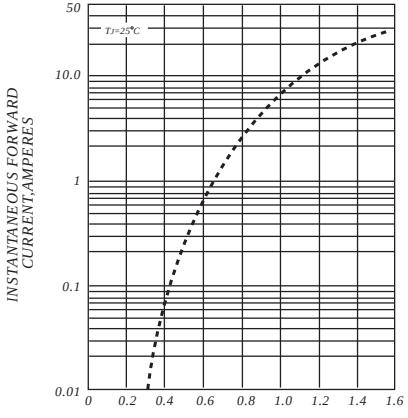


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

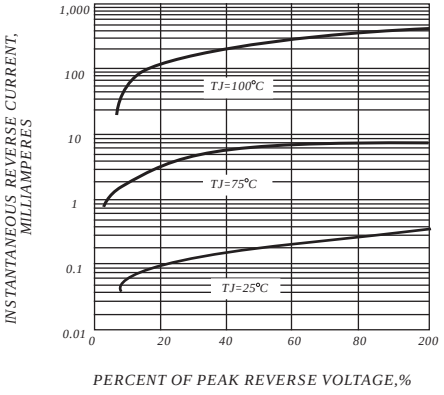


FIG. 5-TYPICAL JUNCTION CAPACITANCE

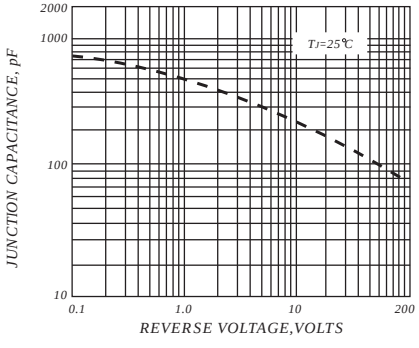


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE