

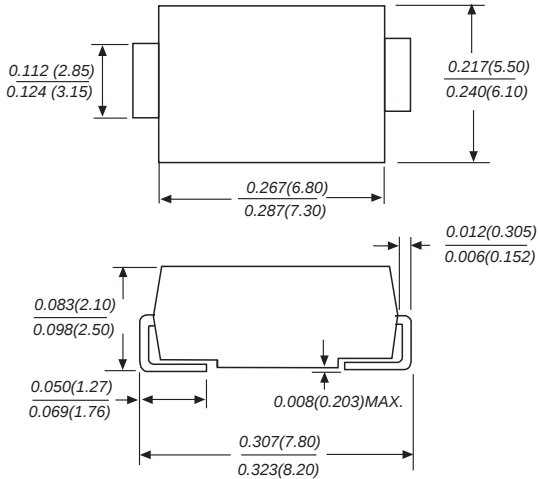
SS32 THRU SS320

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Amperes

SMC

DO-214AB



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-214AB molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.22 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 current derate by 20%.

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	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}	70.0									Amps
Maximum instantaneous forward voltage at 3.0A	V _F	0.55			0.70		0.85		0.95		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5							1.0		mA
		20			10						
Typical junction capacitance (NOTE 1)	C _J	500			300						pF
Typical thermal resistance (NOTE 2)	R _{qJA}	55.0							62.0		°C/W
Operating junction temperature range	T _J	-65 to +125			-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 SS32 THRU SS320

FIG. 1- FORWARD CURRENT DERATING CURVE

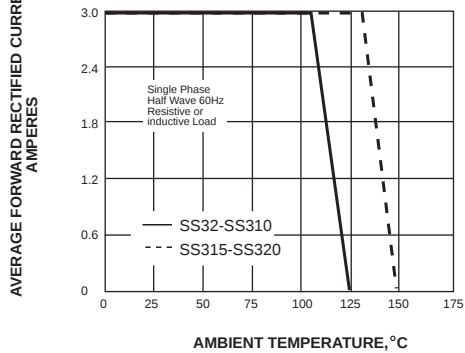


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

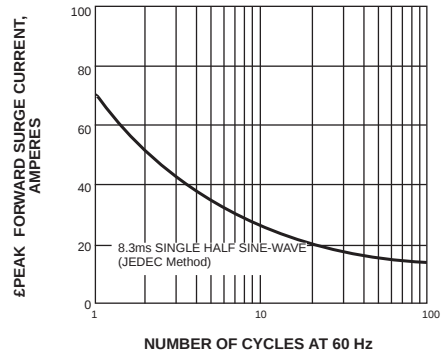


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

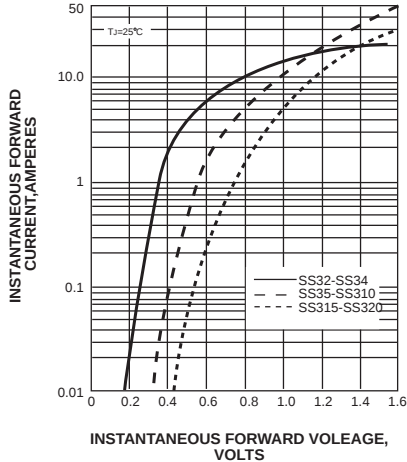


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

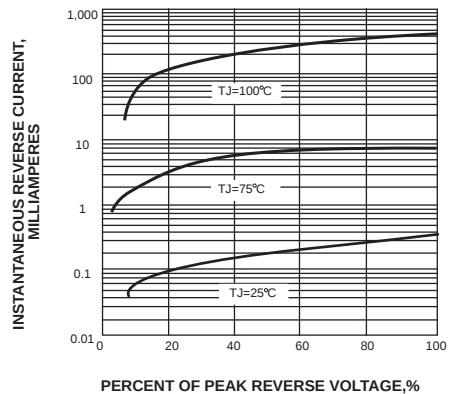


FIG. 5-TYPICAL JUNCTION CAPACITANCE

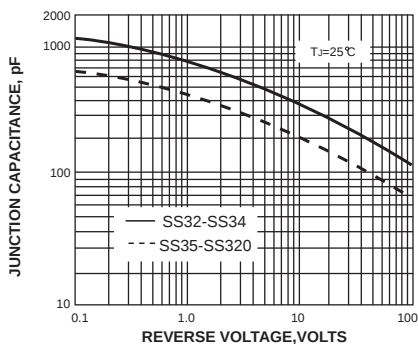


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

