

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20 --- 200 V
CURRENT: 3.0A

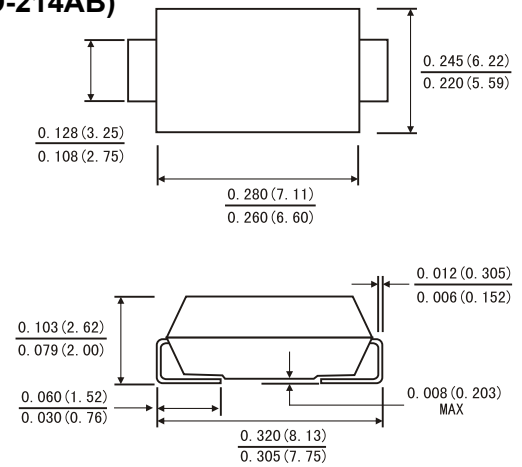
FEATURES

- ◇ Metal-semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC SMC(DO-214AB), molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.007 ounces, 0.21 grams
- ◇ Mounting position: Any

SMC(DO-214AB)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

	Symbols	SS 32	SS 33	SS 34	SS 35	SS 36	SS 38	SS 310	SS 315	SS 320	Volts
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1)	I(AV)	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80.0									Amps
Maximum instantaneous forward voltage at 3.0 A (Note 1)	VF	0.55		0.75		0.85		0.90		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	IR	0.2									mA
		20			10						
Typical junction capacitance (Note 3)	CJ	250			160						PF
Typical thermal resistance (Note 2)	RθJA	55.0									°C/W
	RθJL	17.0									
Operating junction temperature range	TJ	-65 to +150									°C
Storage temperature range	TSTG	-65 to +150									°C

- NOTE: 1. Pulse test: 300us pulse width, 1% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient

FIG.1-FORWARD CURRENT DERATING CURVE

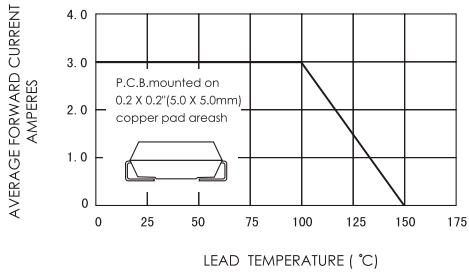


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

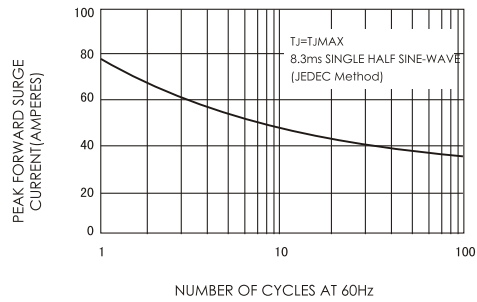


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

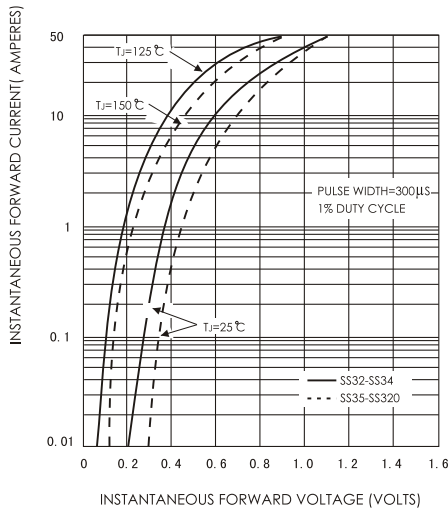


FIG.4-TYPICAL REVERSE CHARACTERISTICS

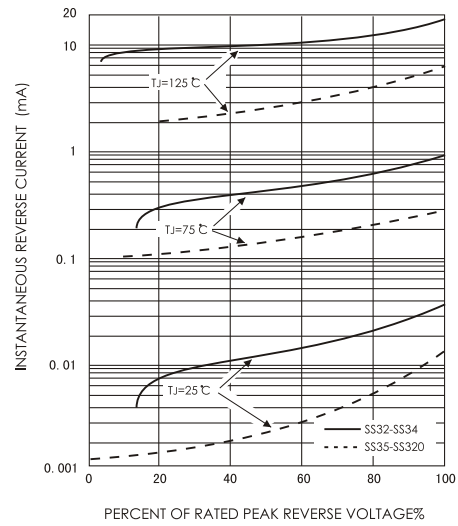


FIG.5-TYPICAL JUNCTION CAPACITANCE

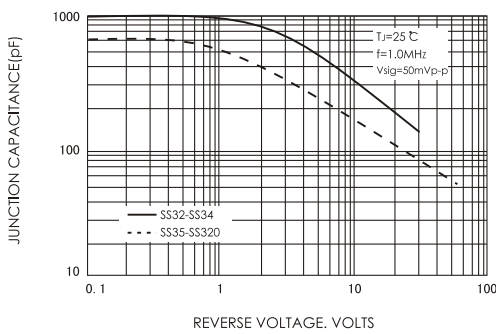


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

