SAMYANG ELECTRONICS

SS32A --- SS320A

SCHOTTKY BARRIER RECTIFIER

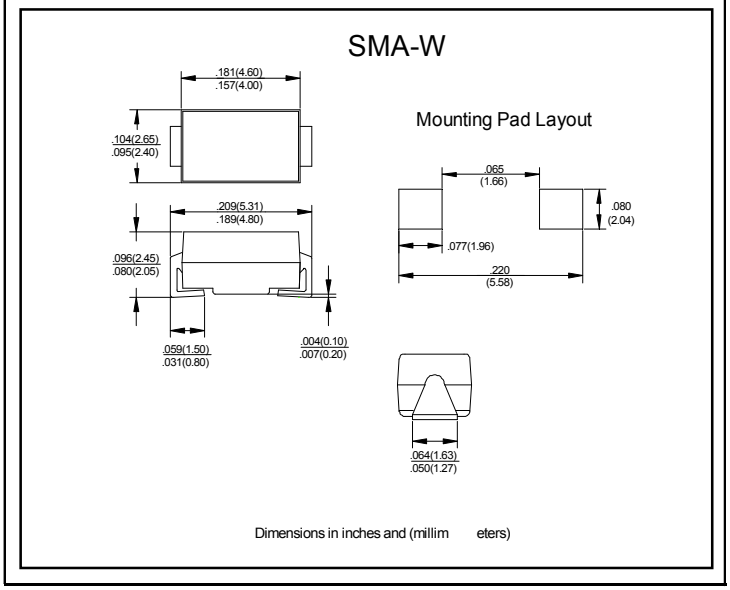
VOLTAGE RANGE: 20 --- 200 V
CURRENT: 3.0A

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 SMA(DO-214AC),molded plastic
- ◇Terminals: Axial lead ,solderable per MIL- STD-750,Method 2026
- ◇Polarity: Color band denotes cathode end
- ◇Weight: 0.002 ounces, 0.064 grams
- ◇Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

	Symbols	SS 32A	SS 33A	SS 34A	SS 35A	SS 36A	SS 38A	SS 310A	SS 315	SS 320A	Volts
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	57	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	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)	I_{FSM}	80.0									Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)	V_F	0.55			0.75		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_A =25℃	I_R	0. 2									mA
T_A =100℃		20			10						
Typical junction capacitance(Note 3)	C_J	250			160						pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	55.0 17.0									℃/W
Operating junction temperature range	T_J	-65 to+125			-65 to+150						℃
Storage temperature range	T_{STG}	-65 to+150									℃

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

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FIG.1-FORWARD CURRENT DERATING CURVE

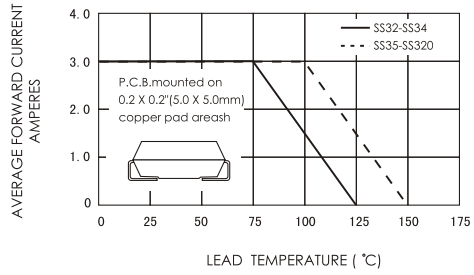


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

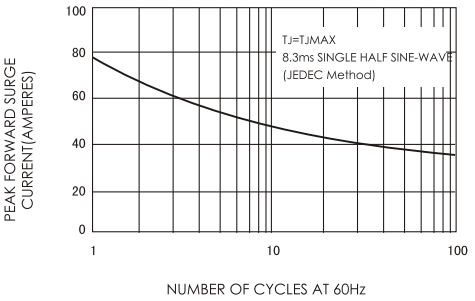


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

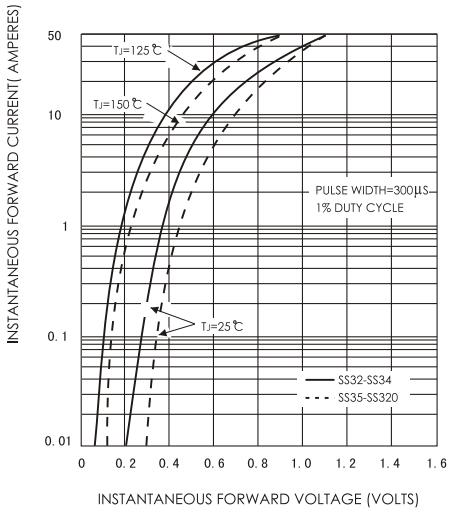


FIG.4-TYPICAL REVERSE CHARACTERISTICS

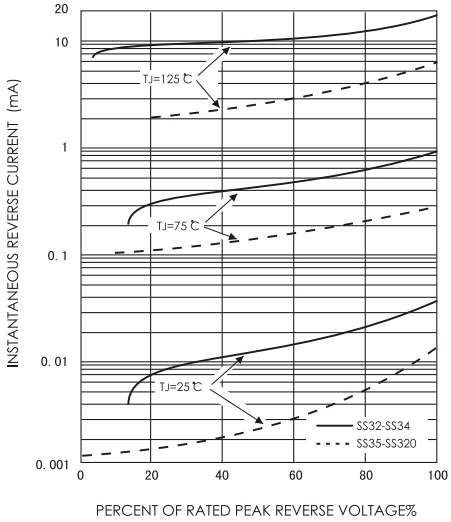


FIG.5-TYPICAL JUNCTION CAPACITANCE

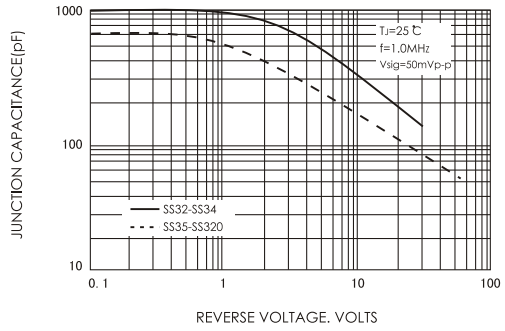
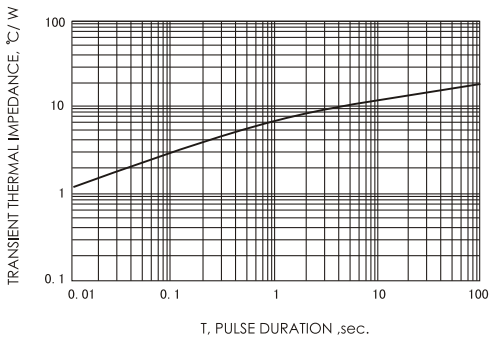


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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