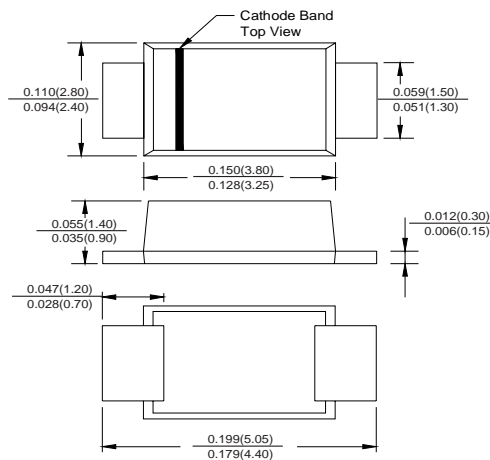


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- built-in strain relief ,ideal for automated placement
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



SMAF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SS 32F	SS 33F	SS 34 F	SS 35F	SS 36F	SS 38F	SS 310F	SS 315F	SS 320F	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)	I _R	0.2									mA
		20			10						
Typical junction capacitance(Note 3)	C _J	250			160						pF
Typical thermal resistance (Note 2)	R _{θJA}	55.0									°C/W
	R _{θJL}	17.0									
Operating junction temperature range	T _J	-65 to+125			-65 to+150						°C
Storage temperature range	T _{STG}	-65 to+150									°C

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm)copper pad areas

3. Measured at 1MHz and reverse voltage of 4.0volts

FIG.1-FORWARD CURRENT DERATING CURVE

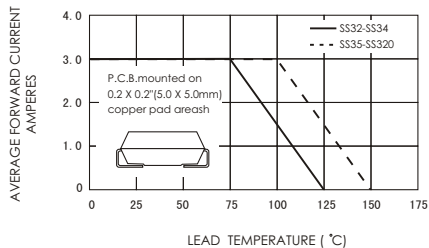


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

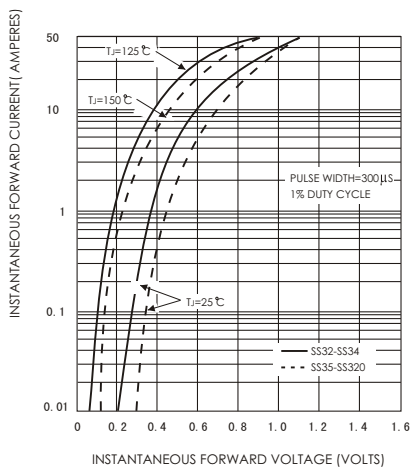


FIG.5-TYPICAL JUNCTION CAPACITANCE

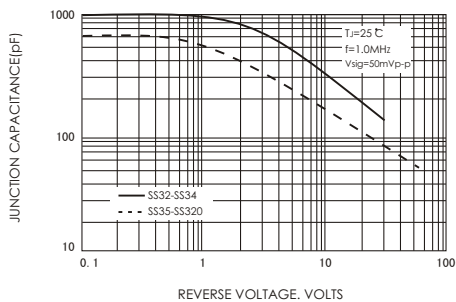


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

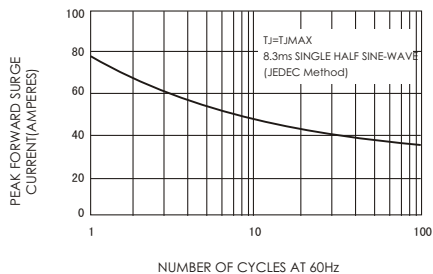


FIG.4-TYPICAL REVERSE CHARACTERISTICS

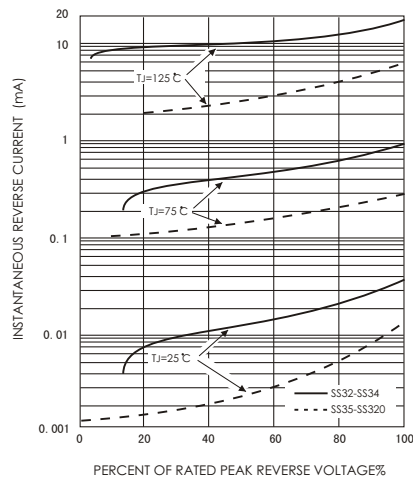


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

