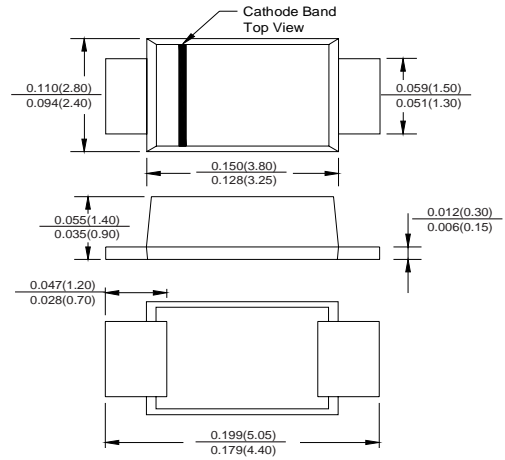


### FEATURES

- 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 : S M A F
- 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 32L	SS 33L	SS 34L	SS 35L	SS 36L	SS 38L	SS 310L	SS 315L	SS 320L	Volts
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	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 <sub>FSM</sub>	80.0									Amps
Maximum instantaneous forward voltage at 3.0 A (Note 1)	V <sub>F</sub>	0.45		0.52		0.68		0.80	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	I <sub>R</sub>	0.2									mA
		20			10						
Typical junction capacitance (Note 3)	C <sub>J</sub>	250			160						Pf
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	55.0									°C/W
	R <sub>θJL</sub>	17.0									
Operating junction temperature range	T <sub>J</sub>	-65 to +150									°C
Storage temperature range	T <sub>STG</sub>	-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

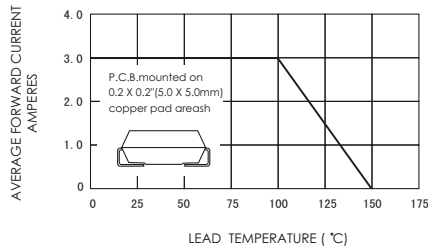


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

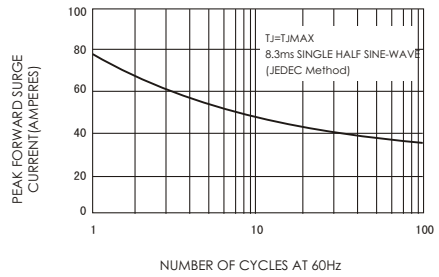


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

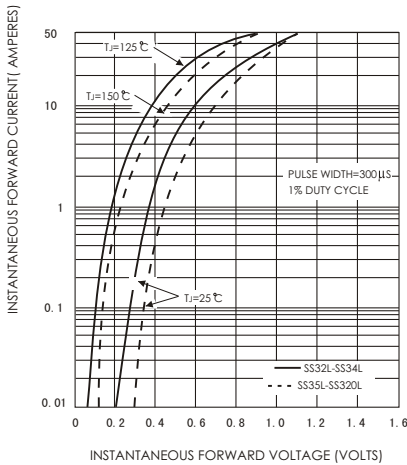


FIG.4-TYPICAL REVERSE CHARACTERISTICS

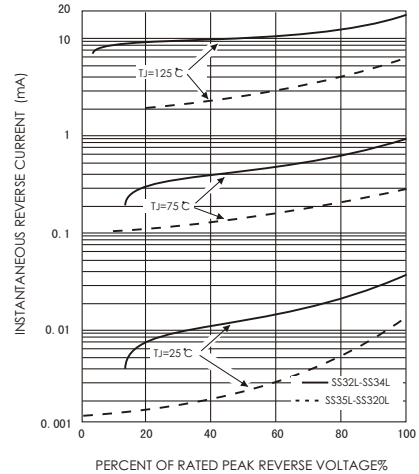


FIG.5-TYPICAL JUNCTION CAPACITANCE

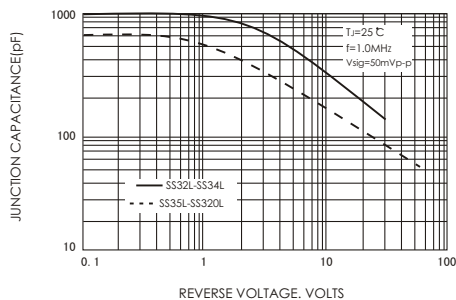


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

