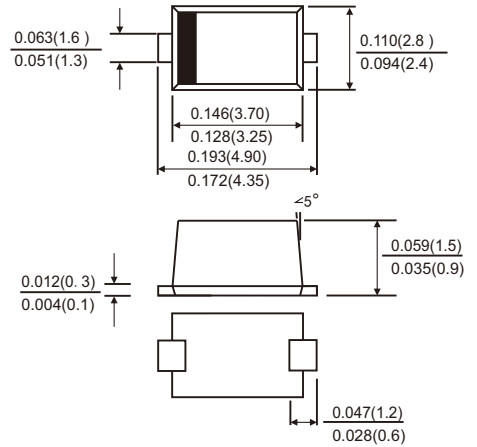


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Built-in strain relief
- For surface mounted applications
- Low profile package
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- 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 2011/65/EU



SMAF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: SMAF molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end

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%.)

Parameters	Symbols	SS 22S	SS 23S	SS 24S	SS 26S	SS 210S	SS 215S	SS 220S	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current	$I_{(AV)}$	2.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0							Amps
Maximum instantaneous forward voltage at 2.0 A(Note 1)	V_F	0.55		0.70		0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	100							μA
	$T_A=100^{\circ}C$	5.0							$m A$
	$T_A=125^{\circ}C$	-							$m A$
Typical thermal resistance(Note 2)	$R_{\theta JA}$	50.0							$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to+150							$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150							$^{\circ}C$

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

2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm)copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS22S THRU SS220S

FIG.1-FORWARD CURRENT DERATING CURVE

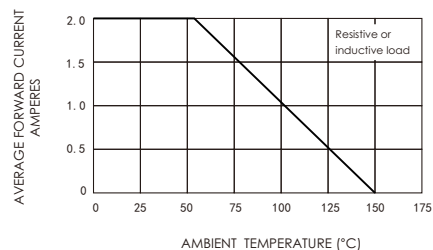


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

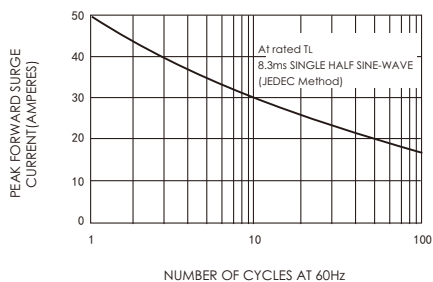


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

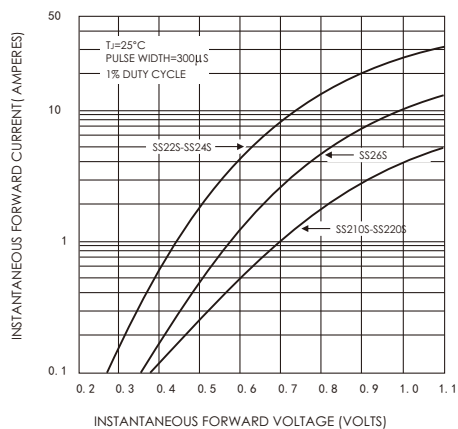


FIG.5-TYPICAL JUNCTION CAPACITANCE

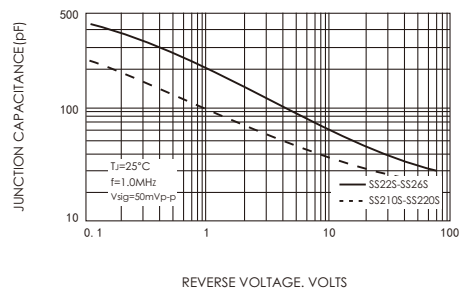


FIG.4-TYPICAL REVERSE CHARACTERISTICS

