SS345L

LOW VF SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 45 Volts
Forward Current - 3.0Amperes

FEATURES

- Very low forward voltage:0.45V
- 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℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/ EU
- Lead free Finish/ROHS Compliant

MECHANICAL DATA

- Case: SMAFL molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- *Weight*: 0.064gram

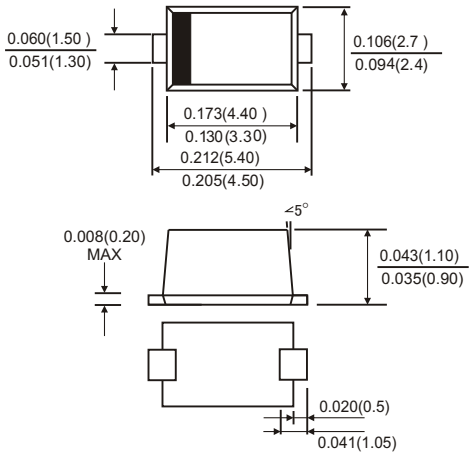
VOLTAGE RANGE

45Volts

CURRENT

3.0 Ampere

SMAFL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	SS345L	Volts
Maximum repetitive peak reverse voltage		V_{RRM}	45	Volts
Maximum RMS voltage		V_{RMS}	31.5	Volts
Maximum DC blocking voltage		V_{DC}	45	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	0.45	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_A=25℃	I_R	0.5	mA
	T_A=100℃		50	
Typical junction capacitance(Note 3)		C_J	250	pF
Typical thermal resistance (Note 2)		$R_{\theta JA}$ $R_{\theta JL}$	88.0 28.0	℃/W
Operating junction temperature range		T_J	-65 to+150	℃
Storage temperature range		T_{STG}	-65 to+150	℃

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

RATING AND CHARACTERISTIC CURVES (SS345L)

FIG.1-FORWARD CURRENT DERATING CURVE

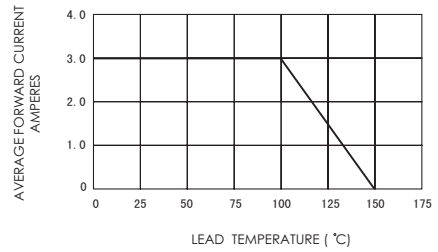


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

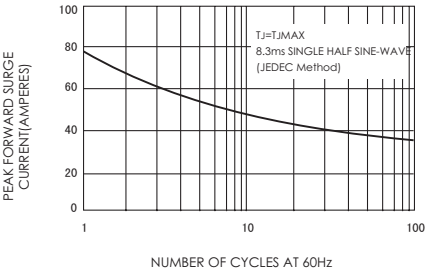


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

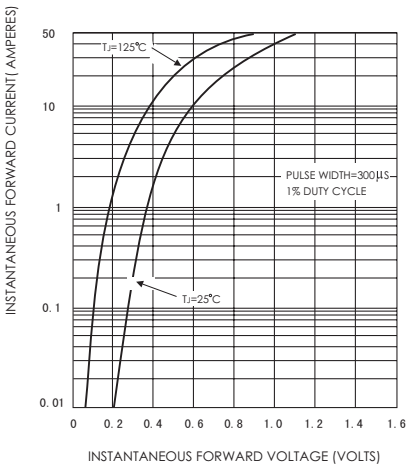


FIG.4-TYPICAL REVERSE CHARACTERISTICS

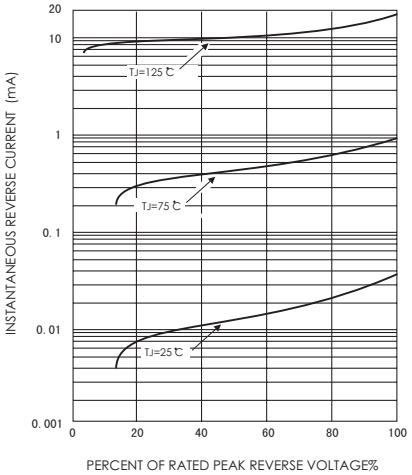


FIG.5-TYPICAL JUNCTION CAPACITANCE

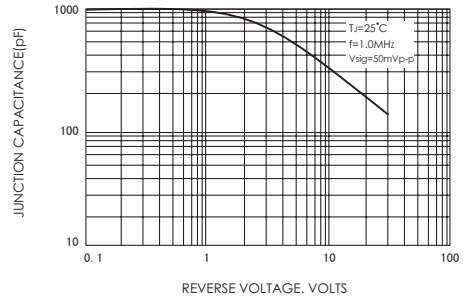


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE