

SS52L THRU SS520L



SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 5.0Amperes

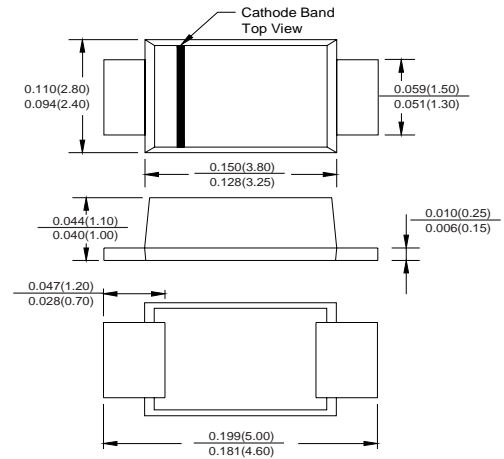
FEATURES

- 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

MECHANICAL DATA

- Case: SMAF
- Terminals:Solderableper MIL-STD-750,Method2026
- Approx.Weight:27mg 0.00086oz

SMAF



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 52 L	SS 53 L	SS 54 L	SS 56 L	SS 57 L	SS 58 L	SS 510 L	SS 515 L	SS 520 L	Units
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 <sub(av)< sub=""></sub(av)<>	5.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated I _A)	I _{FSM}	125									Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1)	V _F	0.45			0.50		0.70	0.80	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	0.2									mA
		50			10						
Typical junction capacitance(Note 3)	C _J	500			400						PF
Typical thermal resistance (Note 2)	R _{θJA}	55.0									°C/W
	R _{θJL}	17.0									
Operating junction temperature range	T _J	-65 to +150									°C
Storage temperature range	T _{STG}	-65 to +150									°C

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FIG. 1-FORWARD CURRENT DERATING CURVE

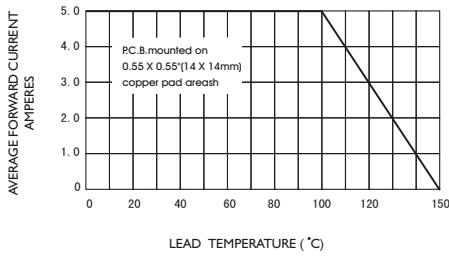


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

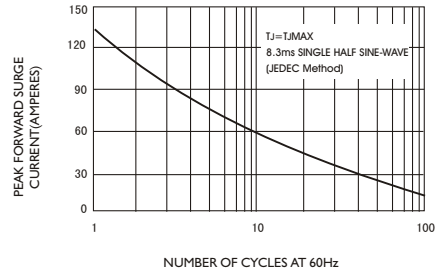


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

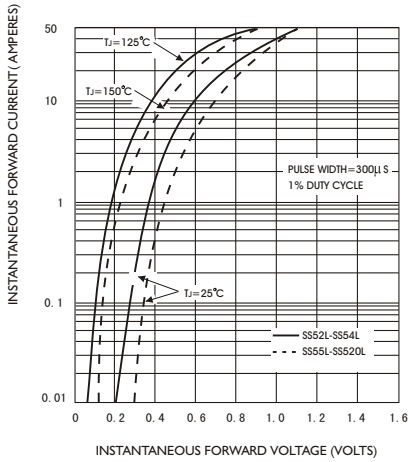


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

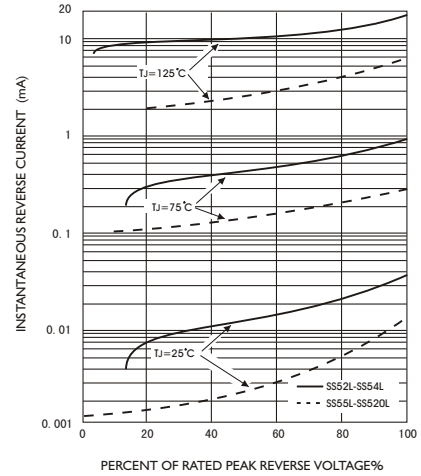


FIG. 5-TYPICAL JUNCTION CAPACITANCE

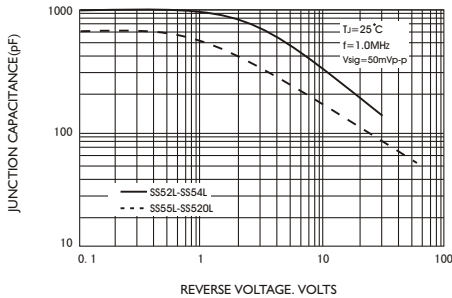


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

