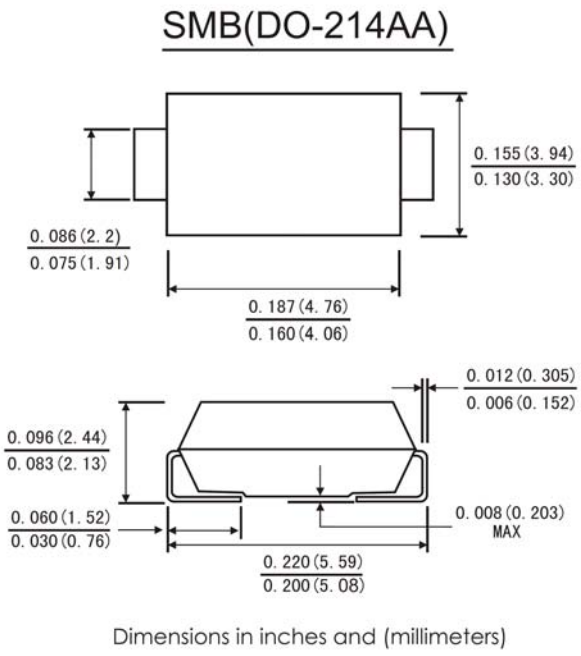
Central Plate
Electronics Co.,Ltd.

SCHOTTKY BARRIER RECTIFIER

SK52 THRU SK520 20 to 200 V 5.0A

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: 250℃/10 seconds at terminals



Dimensions in inches and (millimeters)

Mechanical Data

- Case: JEDEC SMC(DO-214AB) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Weight: 0.007ounce,0.21 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

		Symbols	SK 52	SK 53	SK 54	SK 55	SK 56	SK 58	SK 510	SK 515	SK 520	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage		VDC	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)	5.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)		IFSM	150.0									Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1)		VF	0.55			0.70		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA =25℃	IR	0.2									mA
	TA =100℃		50			10						
Typical junction capacitance(Note 3)		CJ	500			400						PF
Typical thermal resistance (Note 2)		RθJA RθJL	55.0 17.0									℃/W
Operating junction temperature range		TJ	-65 to+150									℃
Storage temperature range		TSTG	-65 to+150									℃

NOTES:

1. Pulse test: 300μs pulse width,1% duty cycle
2. P.C.B. mounted 0.55X0.55"(14X14mm) copper pad areas
3. Measured at 1MHz and reverse voltage of 4.0 volts

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RATINGS AND CHARACTERISTIC CURVES (SS52 THRU SS520)

FIG.1-FORWARD CURRENT DERATING CURVE

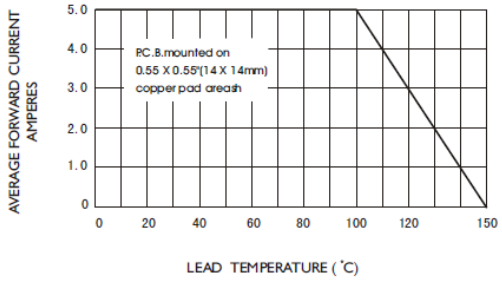

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

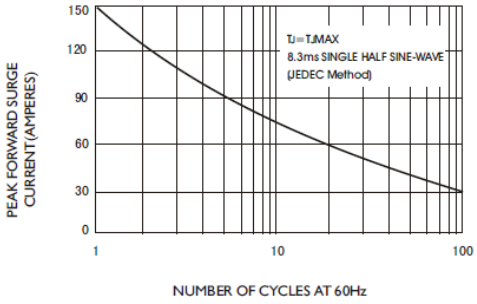

FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

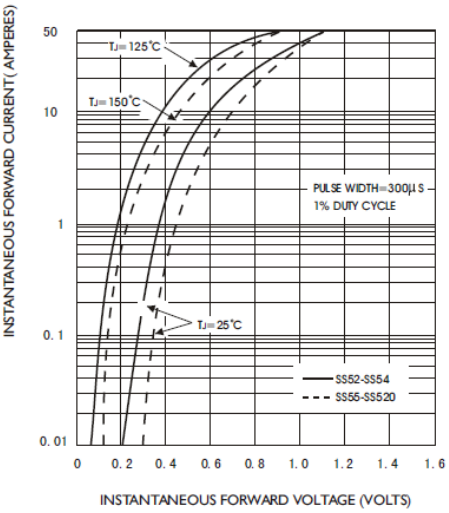

FIG.4-TYPICAL REVERSE CHARACTERISTICS

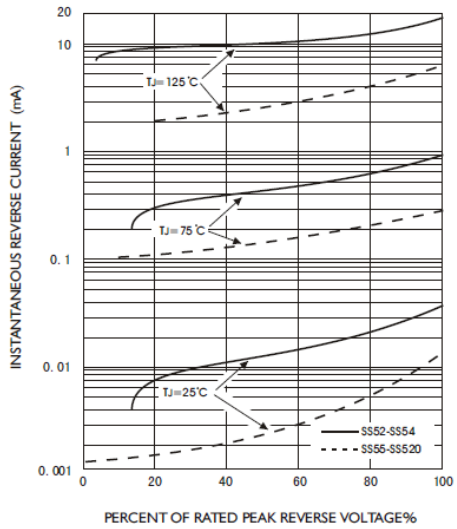

FIG.5-TYPICAL JUNCTION CAPACITANCE

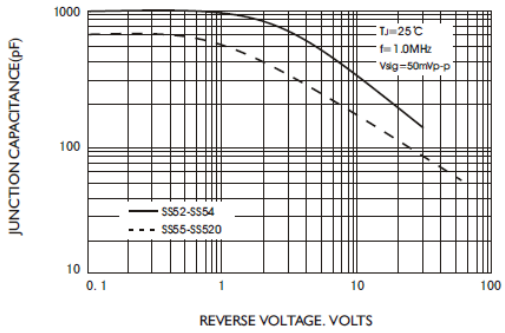

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE