



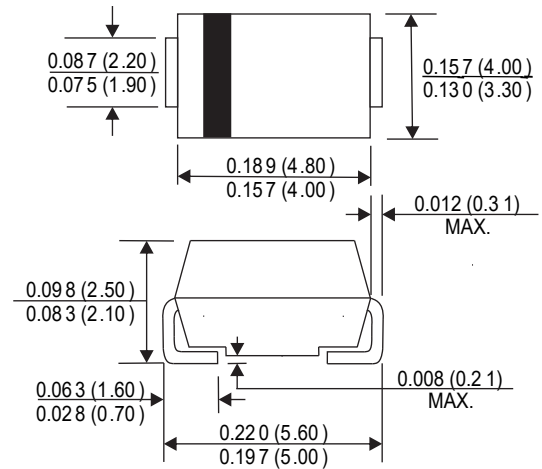
Schottky Barrier Rectifier

SK54B THRU SK520B 40 to 200 V 5.0A

SMB(DO-214AA)

Features And Mechanical Data

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- 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:260°C MAX at 10 seconds, per JESD 22-B106 or MIL-STD-750,method 2026
- Case: JEDEC SMB molded plastic body



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number and marks	Symbols	SK54 SS54B	SK45 SS45B	SK56 SS56B	SK58 SS58B	SK510 SS510B	SK512 SS512B	SK515 SS515B	SK520 SS520B	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	60	80	100	120	150	200	Volts
Maximum RMS Voltage	V _{RMS}	28	31.5	42	56	70	84	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	40	45	60	80	100	120	150	200	Volts
Maximum Average Forward Rectified Current. Lead Length @Ta(Fig 1)	I _(AV)	5.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) (Rating of per diode)	I _{FSM}	90								Amp
Maximum instantaneous forward voltage at I _(AV)	V _F	0.55		0.75		0.85		0.90	0.95	Volts
Maximum DC reverse current at rated DC blocking voltage per T _J =25°C T _J =100°C	I _R	0.5			0.1					mA
		50			10					
Typical Thermal Resistance	R _{θJL}	20								°C/W
Junction Temperature	T _J	-65 to +125			-65 to +150					°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

Note:

- 1.Unit mounted on 16 mm*16 mm*1.6 mm 1oz/ft2 glass epoxy PCB board,pad per pin with 2*2mm solder pad areas
- 2.Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
- 3.The typical data above is for reference only.

*This product The above data sheet typical data meet the Mentioned standards,designers for reference only

Ordering Information (Example)

Prefered P/N	Package code	Unit weight(g)	Minimum Package(pcs)	Inner box Quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
SMB DO-214AA	F1	about 0.096	3000	6000	48000	13' reel



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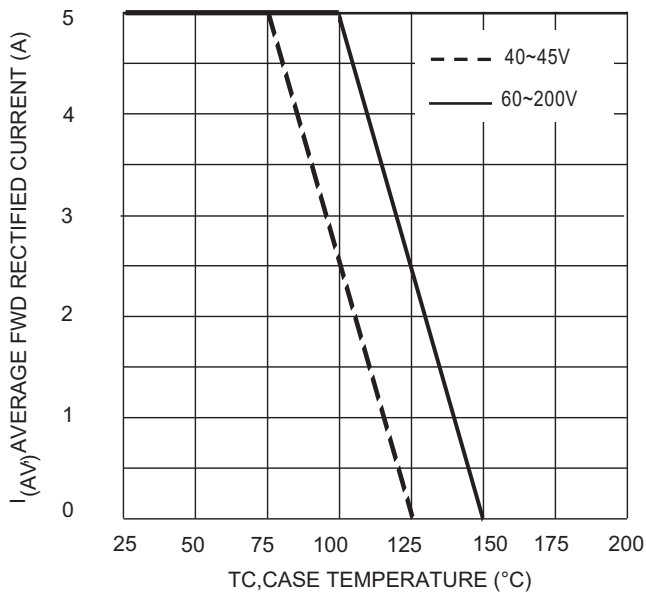


Fig. 1 Forward Derating Curve

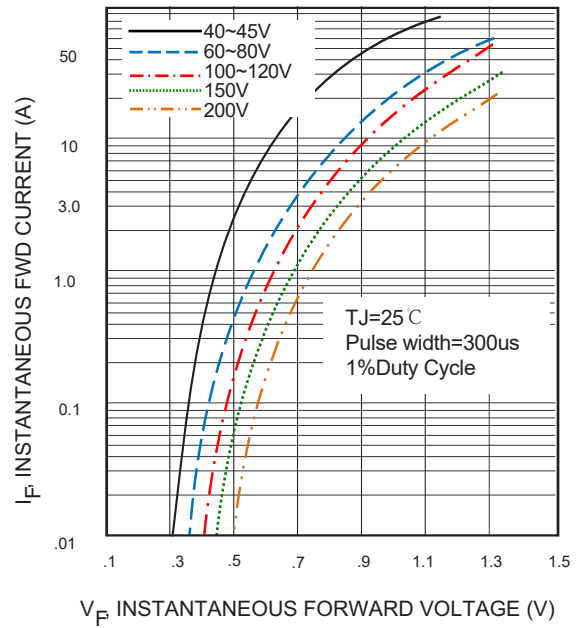


Fig. 2 Typical Forward Characteristics

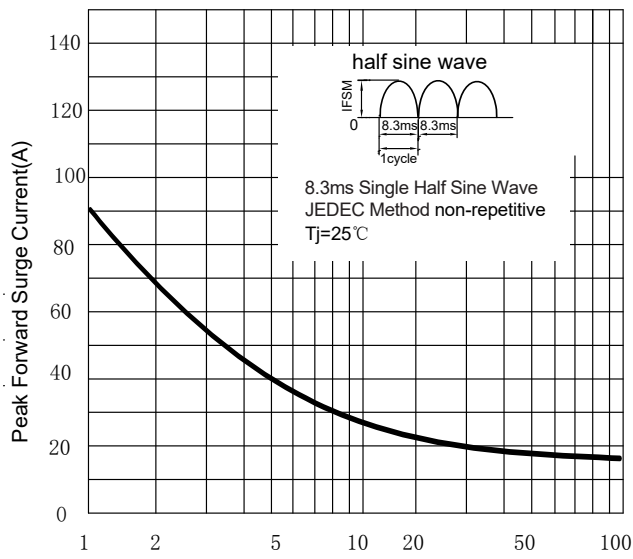


Fig. 3 Peak Forward Surge Current

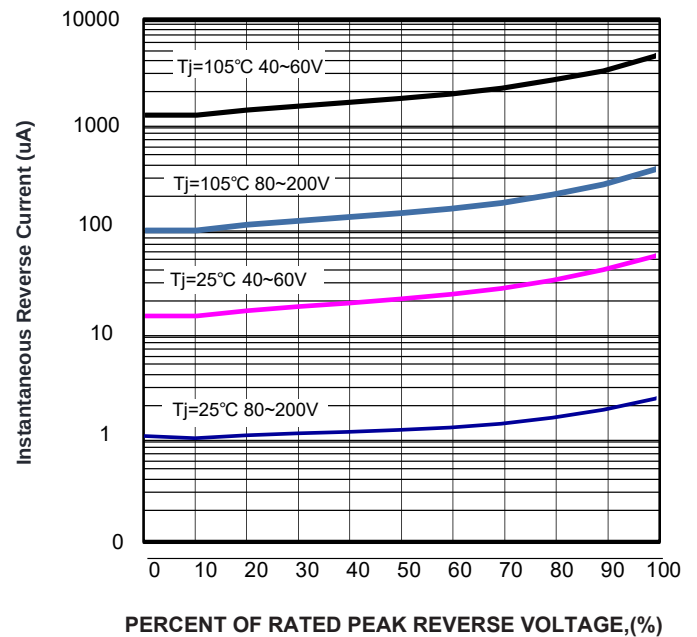


FIG.4-TYPICAL FORWARD CHARACTERISTICS