Schottky Barrier Rectifier

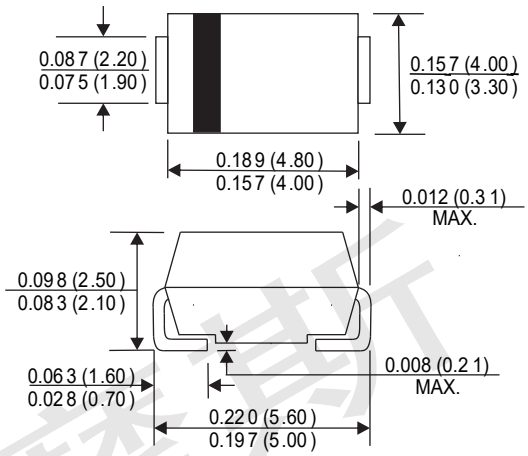
SK54L THRU SK520L 40 to 200 V 5.0A

RoHS COMPLIANT

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℃ MAX at 10 seconds, per JESD 22-B106 or MIL-STD-750,method 2026
- Case: JEDEC SMB(DO-214AA)molded plastic body

SMB(DO-214AA)



Dimensions in inches and (millimeters)

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%.

Parameter	Symbols	SK54L	SK545L	SK56L	SK58L	SK510L	SK512L	SK515	SK520L	Units
Type number marking code		SK54L SS54L	SK545L SS545L	SK56L SS56L	SK58L SS58L	SK510L SS510L	SK512L SS512L	SK515L SS515L	SK520L SS520L	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	0.47		0.55	0.76			0.84	0.88	Volts
Maximum DC reverse current at rated DC blocking voltage per T_j=25℃	I_R	0.2			0.1					mA
T_j=100℃		50			10					
Typical Thermal Resistance	RΘJA RΘJC R_{Θ}JL	18								℃/W
Junction Temperature	T_J	-65 to +150								℃
Storage Temperature Range	T_{STG}	-65 to +150								℃

Note:

The above typical data meet the following standards

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.

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

Schottky Barrier Rectifier

SK54L THRU SK520L 40 to 200 V 5.0A

RoHS COMPLIANT

RATINGS AND CHARACTERISTIV CURVES

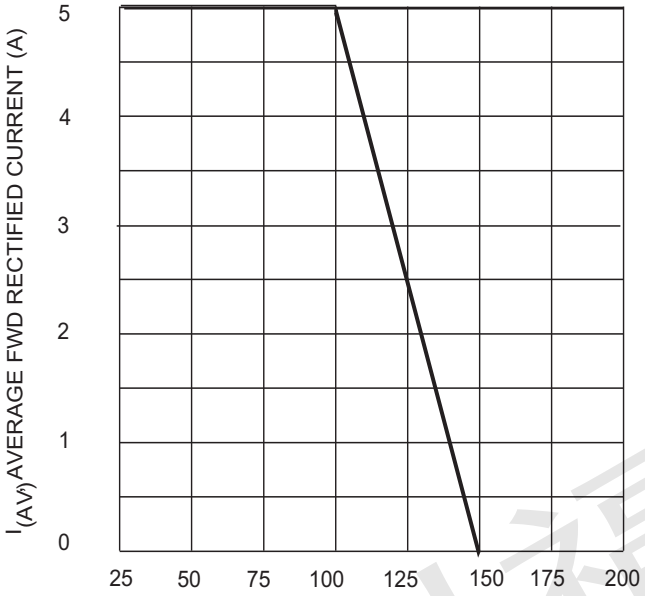


Fig. 1 Forward Derating Curve

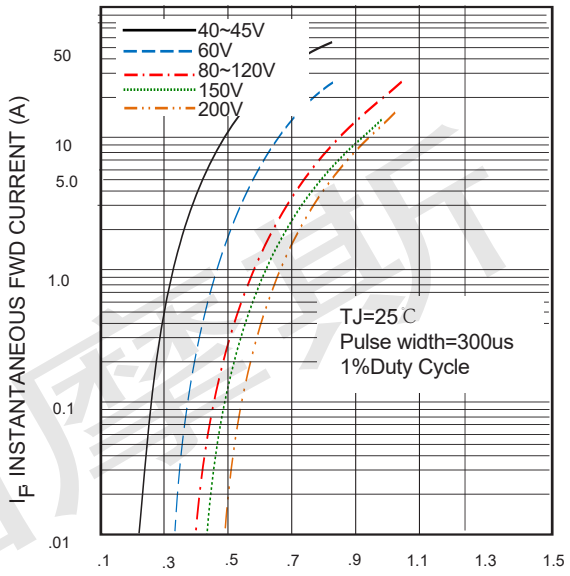


Fig. 2 Typical Forward Characteristics

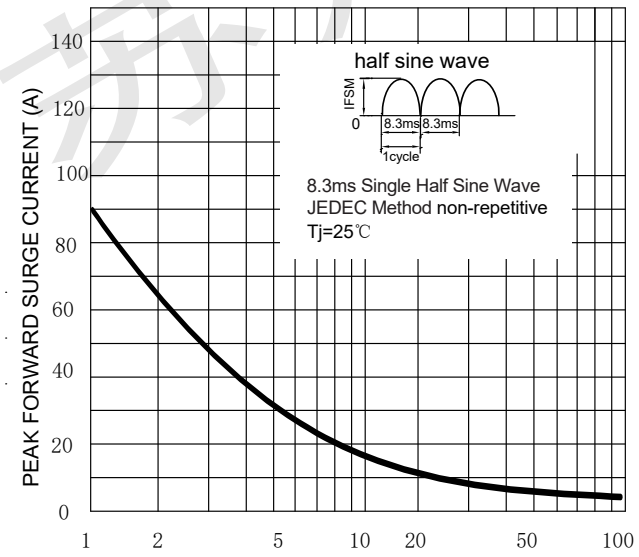


Fig. 3 Peak Forward Surge Current

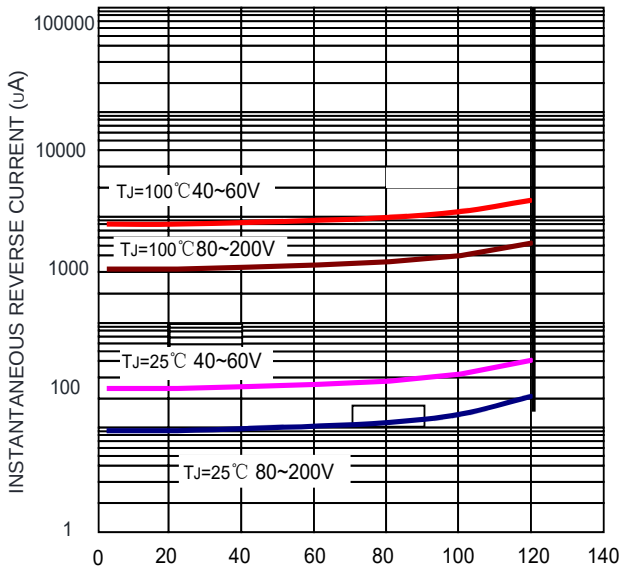


FIG.4-TYPICAL FORWARD CHARACTERISTICS