

SINLOON®
POWER SEMICONDUCTOR

SK12 ~ S110



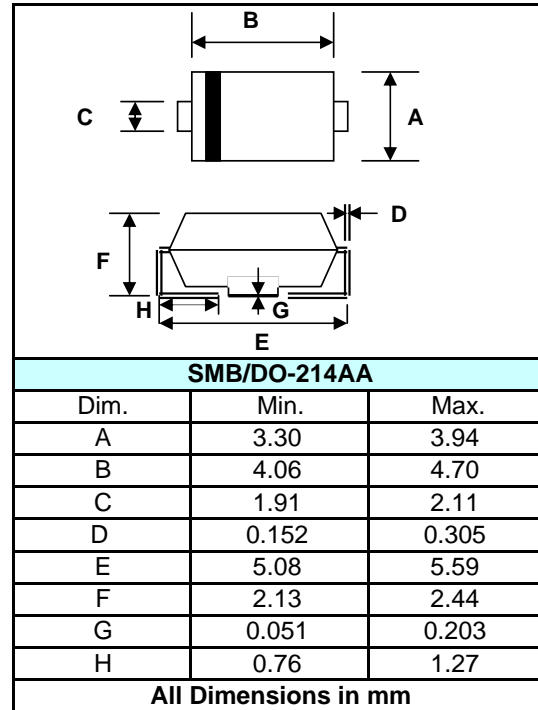
1.0A Surface Mount Schottky Barrier Diode

FEATURE

- ◆ Schottky Barrier Chip
- ◆ Ideally Suited for Automatic Assembly
- ◆ Low power loss, High Efficiency
- ◆ Surge Overload Rating to 30A Peak
- ◆ For Use in low voltahg application
- ◆ Guard ring die construction
- ◆ Plastic Case Meterial has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- ◆ Case: SMB/DO-214AA, Molded Plastic.
- ◆ Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Cathode Band or Cathode Notch
- ◆ Marking: Type Number
- ◆ Weight: 0.093 grams (approx)
- ◆ Lead Free: For RoHS / Lead free Version, Add "LF" suffix to part Number, See page 3.



MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS @TA = 25°C unless otherwise specified

Characteristic	Symbol	SK12	SK13	SK14	SK15	SK16	SK18	SK19	S110	Unit
Peak Repetitive Reverse Voltage	VRRM									
Working Peak Reverse Voltage	VRWM	20	30	40	50	60	80	90	100	V
DC Blocking Voltage	VR									
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	64	71	V
Average Rectified Outpot Current @TL=75°C	IO	1.0								A
Non-Repetitive Peak Forward Sutge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30								A
Forward Voltage @IF=1.0A	VFM	0.50		0.70		0.85				V
Peak Reverse Current @TA=25°C	IRM	0.5								uA
At Rated DC Blocking Voltage @TA=100°C		20								
Typical Thermal Resistance (Note 1)	RθJL	30								°C/W
	RθJA	95								
Operating Temperature Range	Tj	-65 to +125								°C
Storage Temperature Range	TSTG	-65 to +150								°C

Note: 1). Mounted on P.C. Board with 5.0mm² copper pad area.



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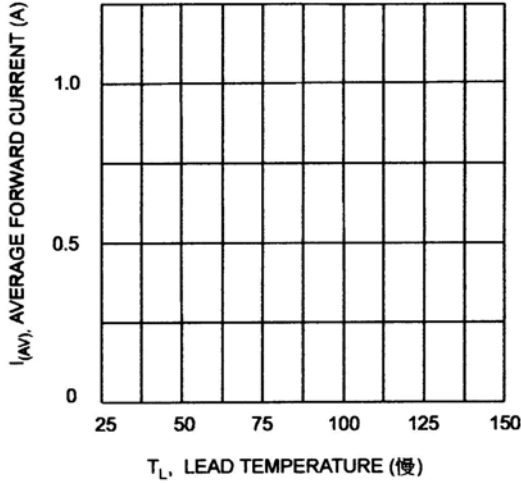


Fig. 1 Forward Current Derating Curve

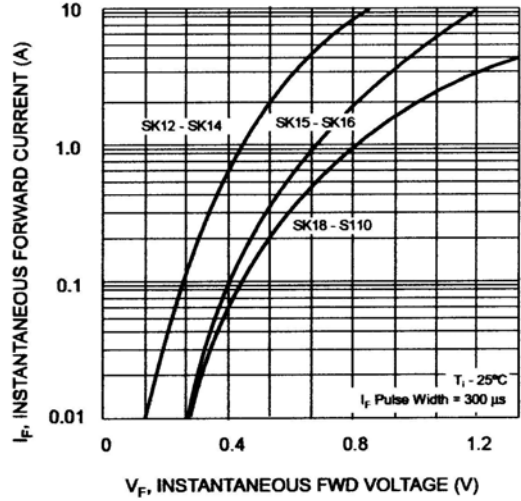


Fig. 2 Typ. Forward Characteristics

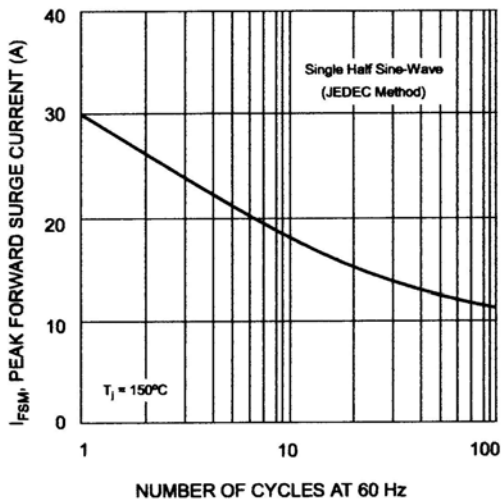


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

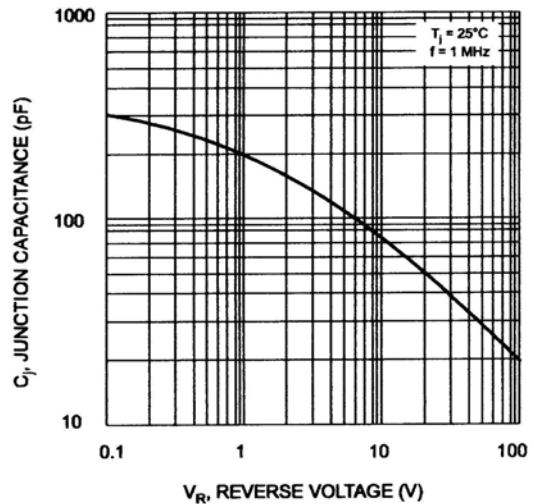


Fig. 4 Typical Junction Capacitance

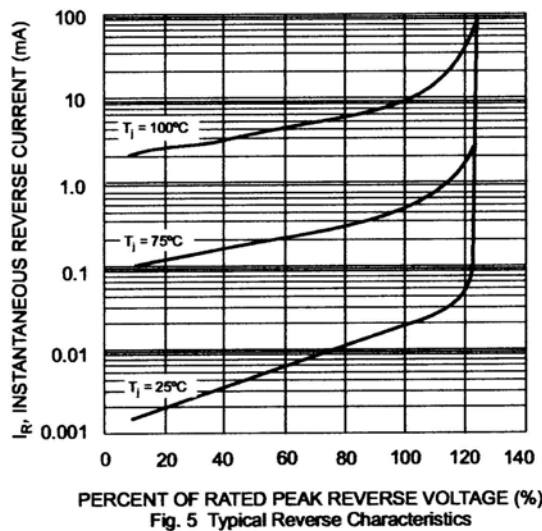
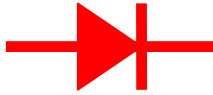


Fig. 5 Typical Reverse Characteristics

SK12-S110 SMB P2



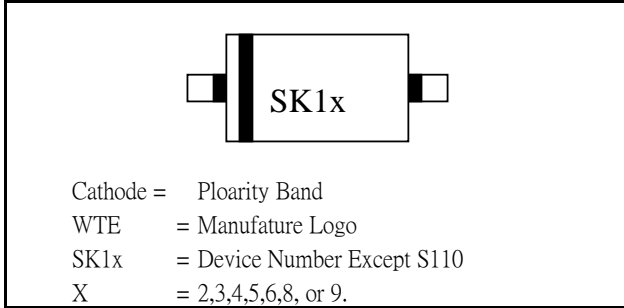
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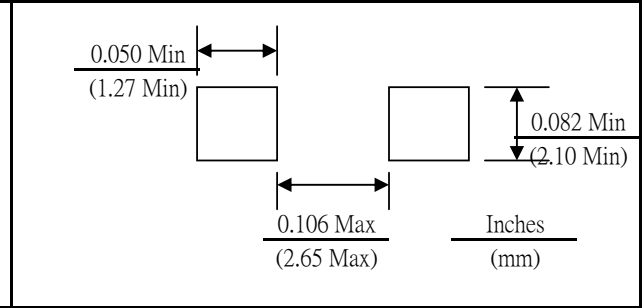


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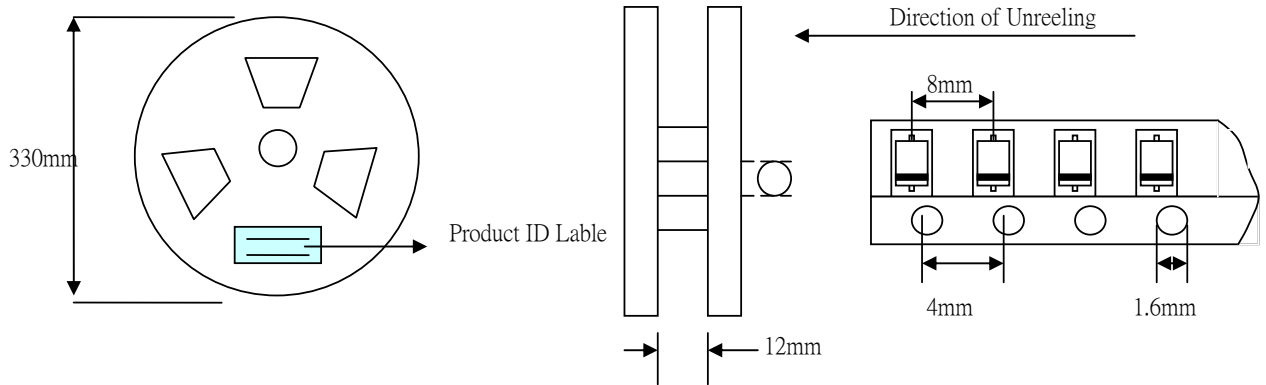
MARKING INFORMATION



RECOMMENDED FOOTPRINT



MARKING INFORMATION



Reel Diameter (mm)	Quantity (PCS)	Inner box Size LxWxH (mm)	Quantity (PCS)	Carton Size LxWxH (mm)	Quantity (PCS)	Approx Gross Weight (KG)
330	3000	340x337x45	6000	370x370x420	48000	14.0

- Note: 1). Paper reel, white or gray color.
2). Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SK12-T3	SMB	3000/Tape & Reel
SK13-T3	SMB	3000/Tape & Reel
SK14-T3	SMB	3000/Tape & Reel
SK15-T3	SMB	3000/Tape & Reel
SK16-T3	SMB	3000/Tape & Reel
SK18-T3	SMB	3000/Tape & Reel
SK19-T3	SMB	3000/Tape & Reel
S110-T3	SMB	3000/Tape & Reel

- 1). Shipping quantity given in minimum packing quantity only, for minimum order quantity, please consult the Sales Department.
2). To order RoHS /Lead Free version (with Lead Free finish), add "LF" suffix to part number above, for example, SK12-T3-LF.