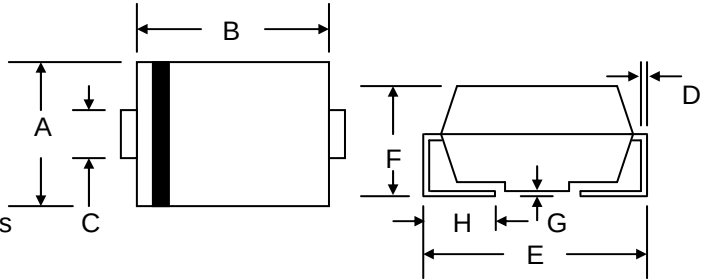


Features

- Low Forward Voltage
- Epitaxial Construction with Oxide Passivation
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 150A Peak
- Low Power Loss
- Fast Switching
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



Mechanical Data

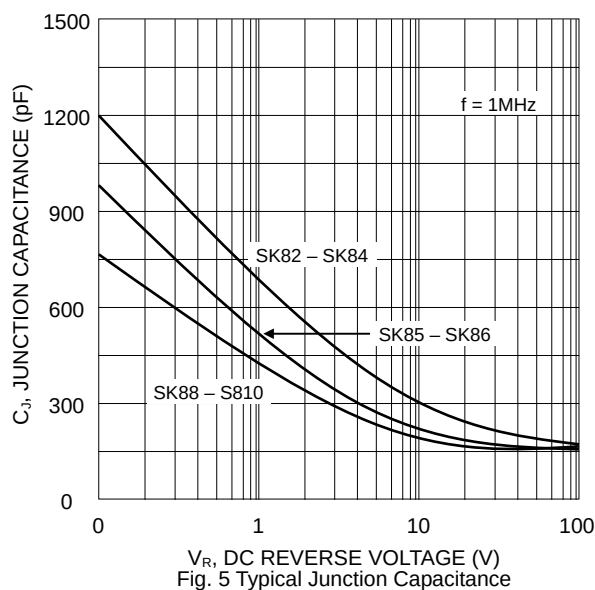
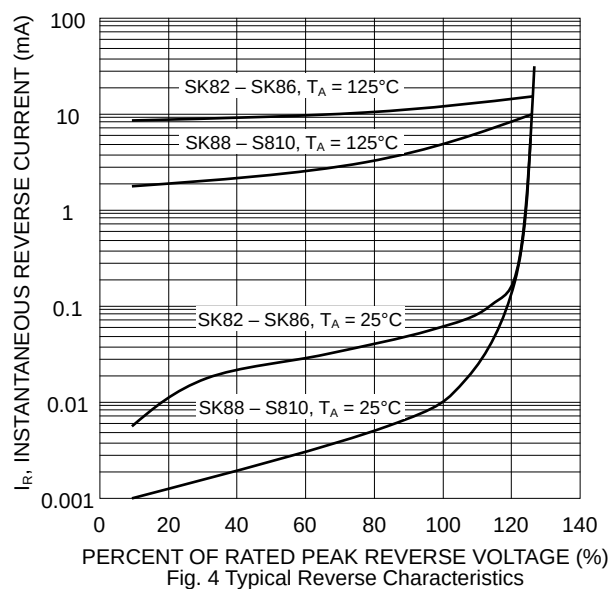
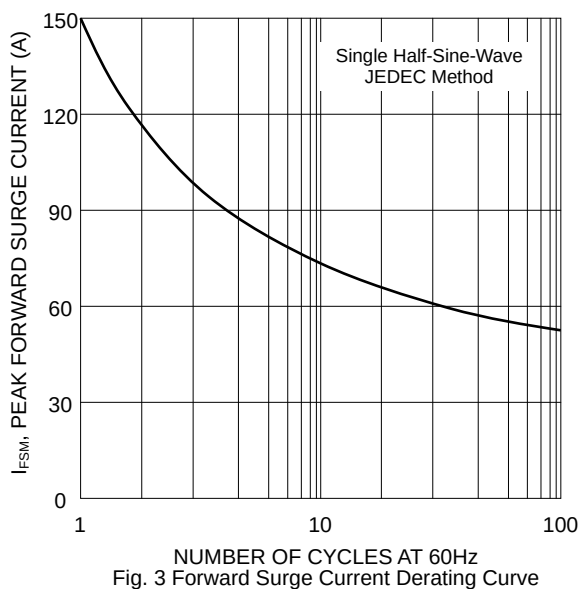
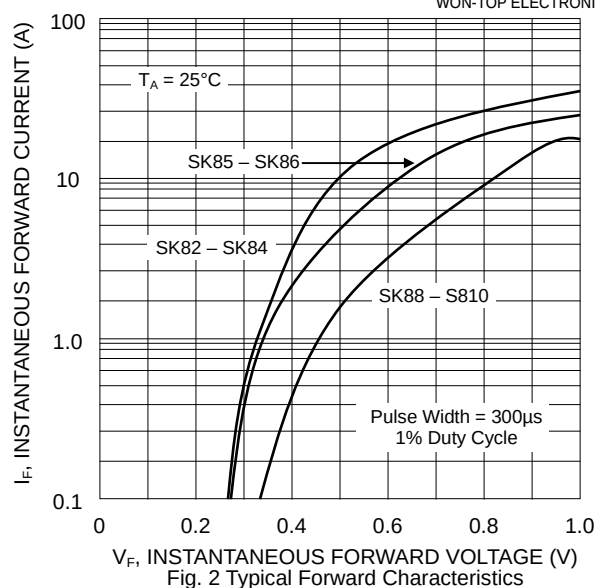
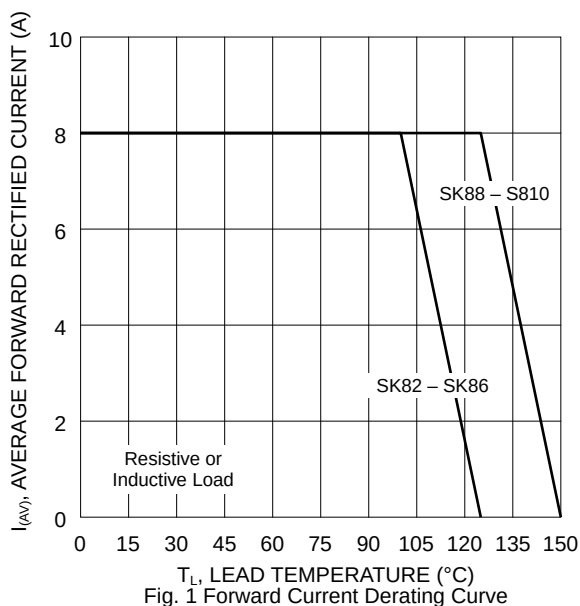
- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Device Code, See Page 3
- Weight: 0.21 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.25
D	0.152	0.305
E	7.75	8.13
F	2.00	2.62
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	SK82	SK83	SK84	SK85	SK86	SK88	SK89	S810	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	63	70	V
Average Rectified Output Current	Io	8.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	150								A
Forward Voltage @IF = 8.0A	VFM	0.55			0.70		0.87			V
Peak Reverse Current @TA = 25°C At Rated DC Blocking Voltage @TA = 100°C	IRM	0.5 30					0.2 10			mA
Typical Junction Capacitance (Note 1)	CJ	420			300		260			pF
Thermal Resistance, Junction to Ambient (Note 2) Thermal Resistance, Junction to Case (Note 2)	RθJA RθJC	50 30								°C/W
Operating Temperature Range	TJ	-55 to +125					-55 to +150			°C
Storage Temperature Range	TSTG	-55 to +150								°C

Note: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.
2. Mounted on FR-4 PCB with 3.8 x 6.6mm copper pads.

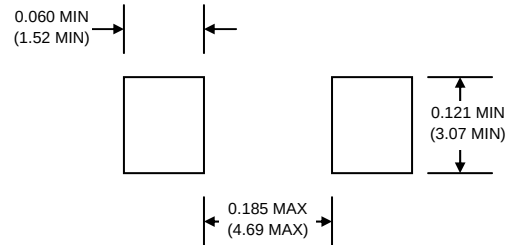


MARKING INFORMATION



Cathode = Polarity Band
 SK8x = Device Number Except S810
 x = 2, 3, 4, 5, 6, 8 or 9

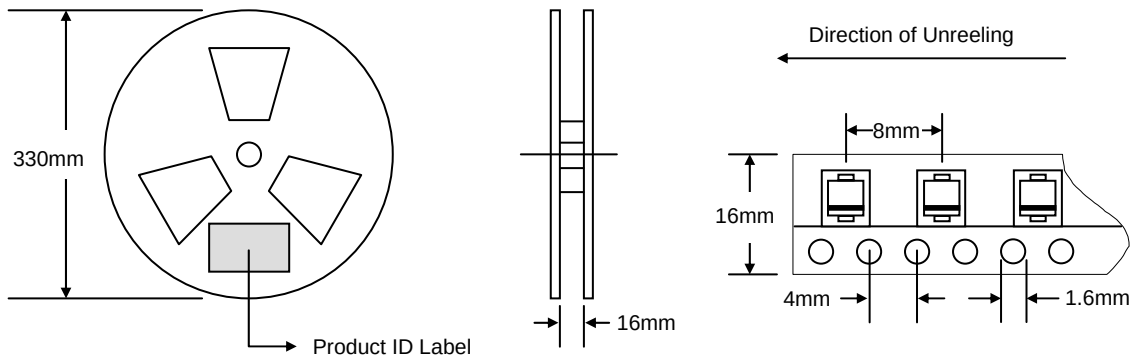
RECOMMENDED FOOTPRINT



inches(mm)

PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	19.0

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
SK82-T3	SMC	3000/Tape & Reel
SK83-T3	SMC	3000/Tape & Reel
SK84-T3	SMC	3000/Tape & Reel
SK85-T3	SMC	3000/Tape & Reel
SK86-T3	SMC	3000/Tape & Reel
SK88-T3	SMC	3000/Tape & Reel
SK89-T3	SMC	3000/Tape & Reel
S810-T3	SMC	3000/Tape & Reel

1. Shipping quantity given is for 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, SK82-T3-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.