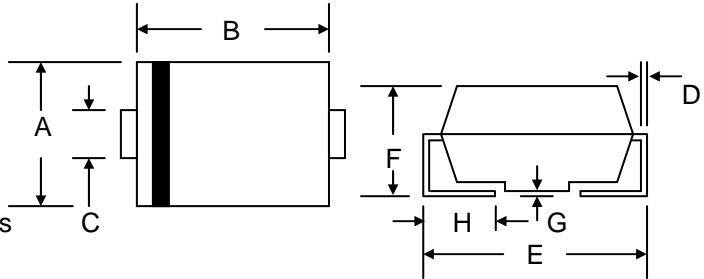


Features

- Low Forward Voltage
- Epitaxial Construction with Oxide Passivation
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 125A Peak
- Low Power Loss
- Fast Switching
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



Mechanical Data

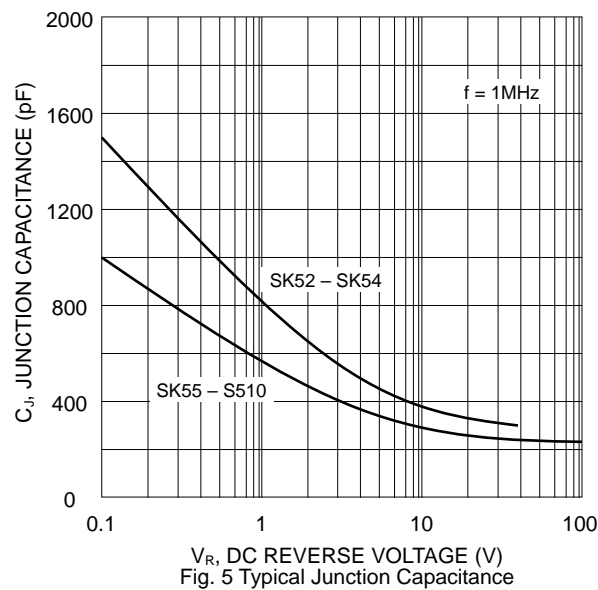
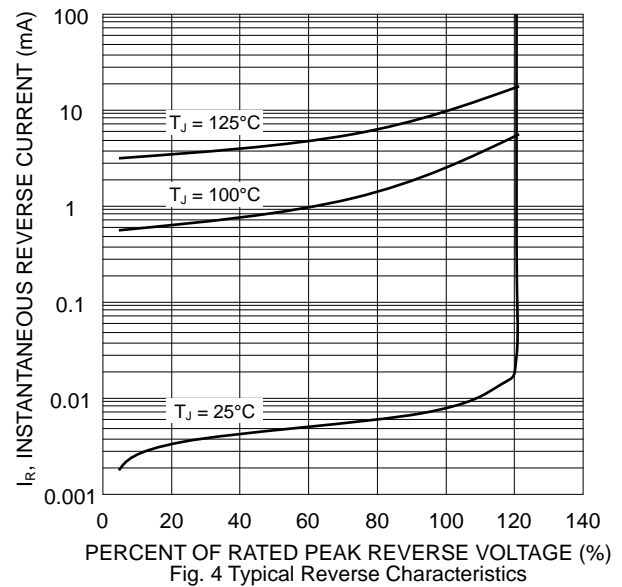
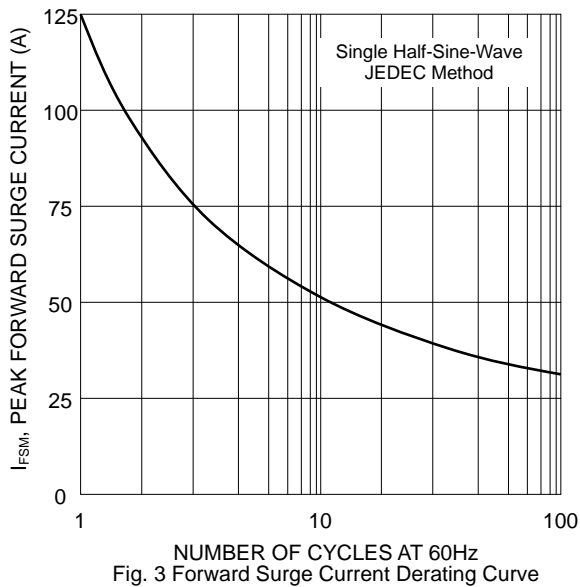
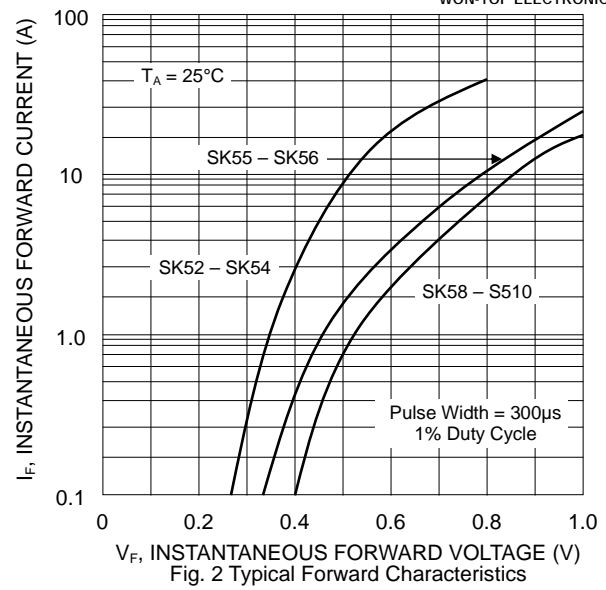
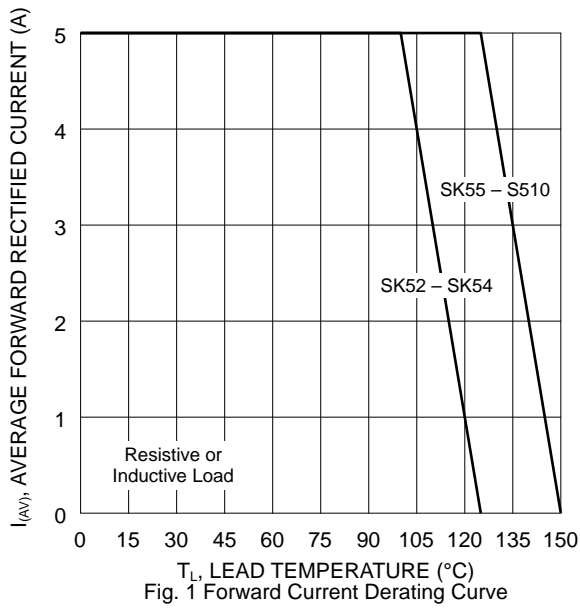
- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

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	SK52	SK53	SK54	SK55	SK56	SK58	SK59	S510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	56	63	70	V
Average Rectified Output Current (Note 1)	I _O	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	125								A
Forward Voltage @I _F = 5.0A	V _{FM}	0.50			0.75		0.85			V
Peak Reverse Current @T _J = 25°C At Rated DC Blocking Voltage @T _J = 100°C	I _{RM}	0.5 20								mA
Typical Junction Capacitance (Note 2)	C _J	500			380					pF
Thermal Resistance, Junction to Ambient (Note 1) Thermal Resistance, Junction to Case (Note 1)	R _{JA} R _{JC}	50 14								°C/W
Operating Temperature Range	T _J	-55 to +125			-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Note: 1. Mounted on FR-4 PCB with 14 x 14mm copper pads.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

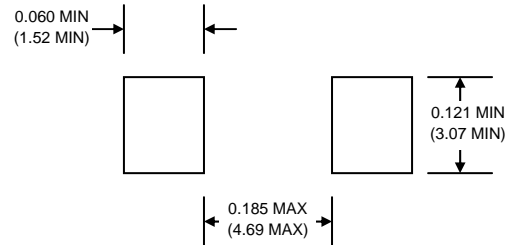


MARKING INFORMATION



Cathode = Polarity Band
 SK5x = Device Number Except S510
 x = 2, 3, 4, 5, 6, 8 or 9

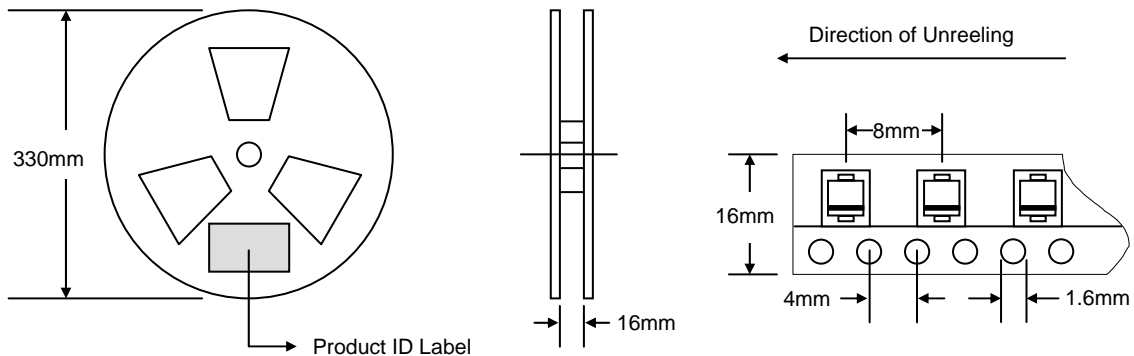
RECOMMENDED FOOTPRINT



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
SK52-T3	SMC	3000/Tape & Reel
SK53-T3	SMC	3000/Tape & Reel
SK54-T3	SMC	3000/Tape & Reel
SK55-T3	SMC	3000/Tape & Reel
SK56-T3	SMC	3000/Tape & Reel
SK58-T3	SMC	3000/Tape & Reel
SK59-T3	SMC	3000/Tape & Reel
S510-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, SK52-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.