

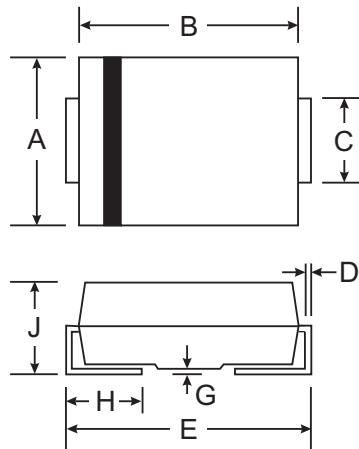
### Features

- Guard Ring Construction for Transient Protection
- High Current Capability and Low VF
- Capable of Meeting Environmental Standards of MIL-STD-19500
- Plastic Material - UL Flammability Classification 94V-0

### Mechanical Data

- Case: SMC, Molded Plastic
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 5, on Page 3
- Polarity: Cathode Band
- Approx. Weight: 0.21 grams

NOT RECOMMENDED FOR  
NEW DESIGN, Use B3X0 Series



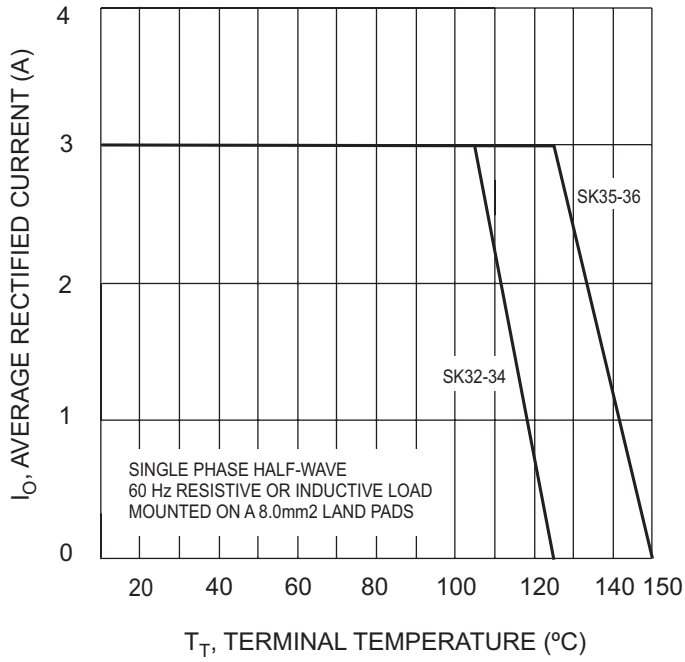
SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.21
H	0.76	1.52
J	2.00	2.40
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics

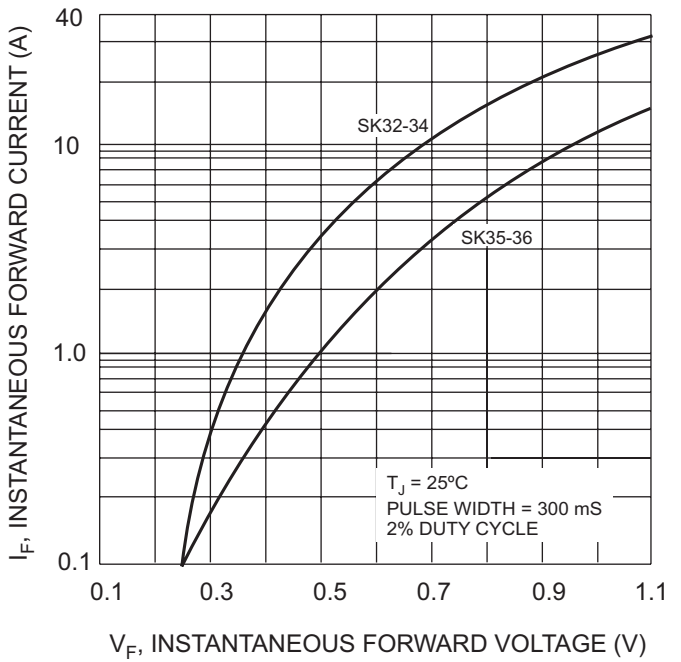
Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz resistive or inductive load.

Characteristic	Symbol	SK32	SK33	SK34	SK35	SK36	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current (See Fig. 1)	$I_{(AV)}$	3.0					A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100					A
Maximum Instantaneous Forward Voltage at 3.0A (See Note 1)	$V_F$	0.50			0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage (See Note 1)	$I_R$				0.5 20		mA
Maximum Thermal Resistance (See Note 2)	$R_{\theta JL}$	10					°C/W
	$R_{\theta JA}$	60					
Typical Total Capacitance (See Note 3)	$C_T$	300					pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150					°C

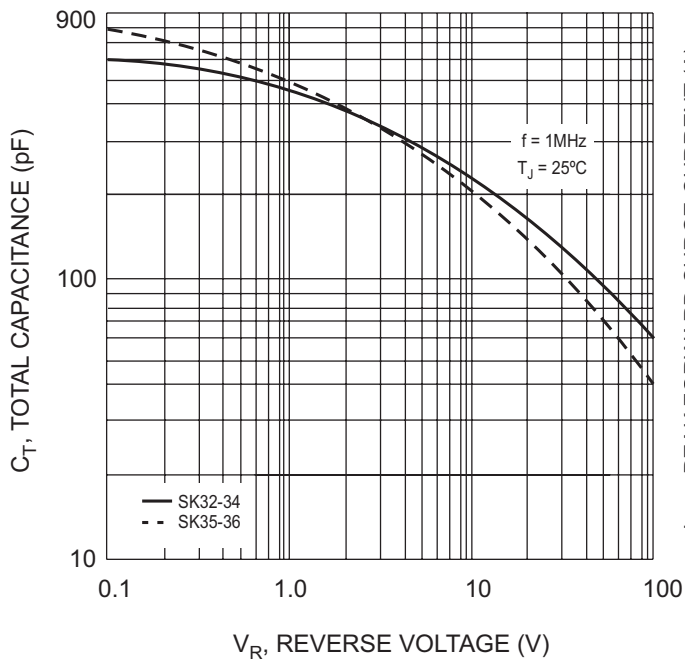
- Notes:
1. Pulse Test Pulse Width 300  $\mu$ S, Duty Cycle 2%.
  2. 8.0mm<sup>2</sup> (0.13mm thick) land pads.
  3. Measured at 1.0MHz and applied reverse voltage of 4.0V.



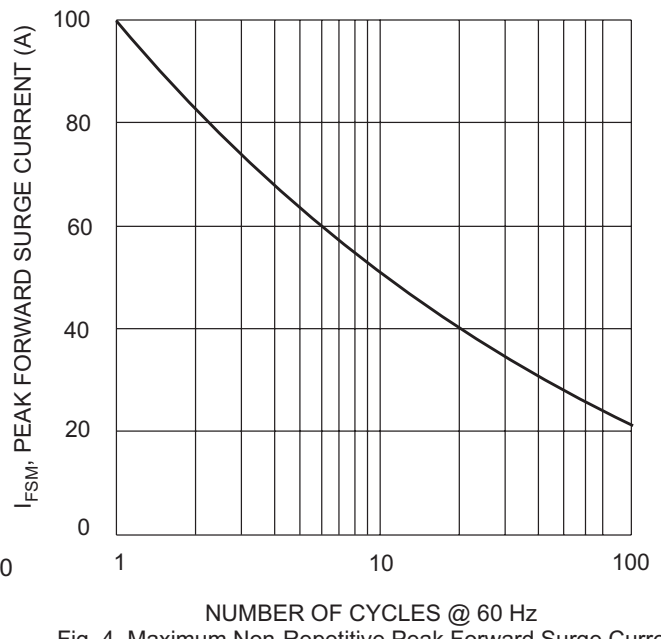
$T_T$ , TERMINAL TEMPERATURE (°C)  
Fig. 1 Forward Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 3 Typical Total Capacitance



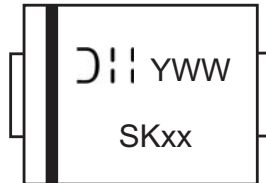
NUMBER OF CYCLES @ 60 Hz  
Fig. 4 Maximum Non-Repetitive Peak Forward Surge Current

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**Ordering Information** (Note 4 & 5)

Device*	Packaging	Shipping
SKxx-7	SMC	3000/Tape & Reel

- Notes:
- For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.
  - \* xx = Device type, e.g. 32 through 36.
  - For lead free terminal plating part number, please add "-F" suffix to part number above. Example: SK36-7-F.



SKxx = Product type marking code, ex: SK32  
 D|| = Manufacturers' code marking  
 YWW = Date code marking  
 Y = Last digit of year ex: 2 for 2002  
 WW = Week code 01 to 52

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