

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

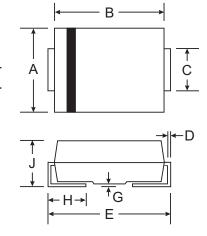
#### **Features**

- 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					
Α	5.59	6.22					
В	6.60	7.11 3.18					
С	2.75						
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.21					
Н	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		20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current (See Fig. 1)	I <sub>(AV)</sub>	3.0				А	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100			А		
Maximum Instantaneous Forward Voltage at 3.0A (See Note 1)	VF	0.50		0.75		V	
Maximum DC Reverse Current at Rated @ $T_A = 25^{\circ}C$ DC Blocking Voltage (See Note 1) @ $T_A = 100^{\circ}C$	I <sub>R</sub>	0.5 20			mA		
Maximum Thermal Resistance (See Note 2)	R <sub>θJL</sub> R <sub>θJA</sub>	10 60			°C/W		
Typical Total Capacitance (See Note 3)		300				pF	
Operating and Storage Temperature Range		-65 to +150				°C	

Notes: 1. Pulse Test Pulse Width 300  $\mu$ S, Duty Cycle 2%.

- $2.\ 8.0 mm^2$  ( $0.13 mm\ thick$ ) land pads.
- 3. Measured at 1.0MHz and applied reverse voltage of 4.0V.

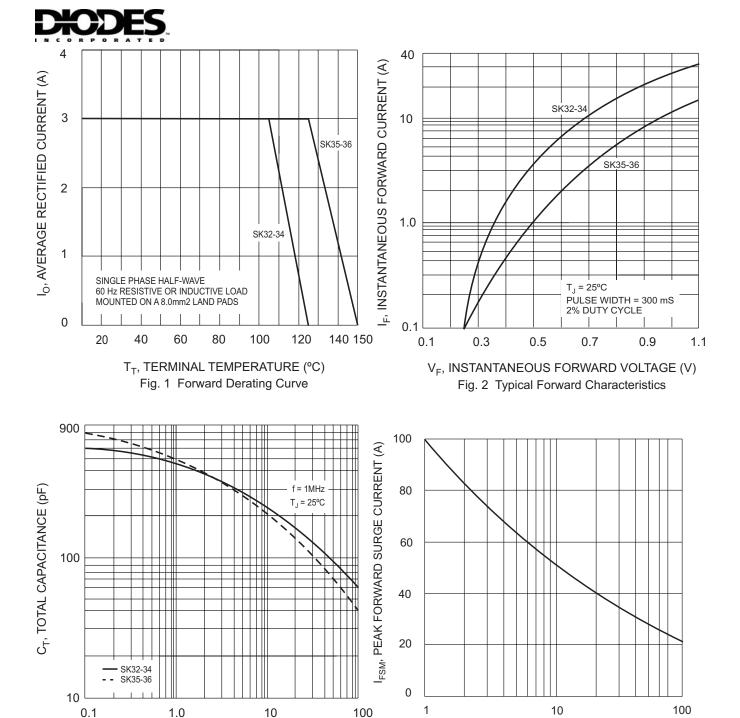


Fig. 3 Typical Total Capacitance

NUMBER OF CYCLES @ 60 Hz

Fig. 4 Maximum Non-Repetitive Peak Forward Surge Current

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V<sub>R</sub>, REVERSE VOLTAGE (V)



### Ordering Information (Note 4 & 5)

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

Notes:

- 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.  $^*$  xx = Device type, e.g. 32 through 36.
- 5. 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
) ||= 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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