SK32 - SK36

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

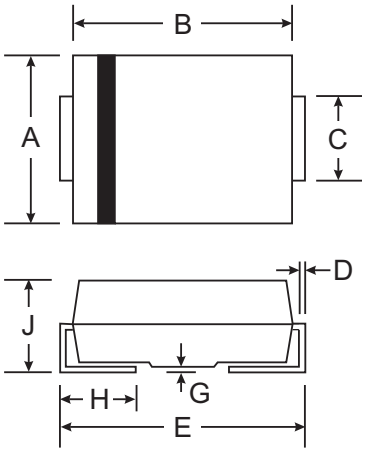
NOT RECOMMENDED FOR NEW DESIGN, Use B3X0 Series

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



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 @ T_A = 25°C DC Blocking Voltage (See Note 1) @ T_A = 100°C	I_R	0.5 20					mA
Maximum Thermal Resistance (See Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	10 60					°C/W
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 μS, Duty Cycle 2%.
2. 8.0mm² (0.13mm thick) land pads.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V.

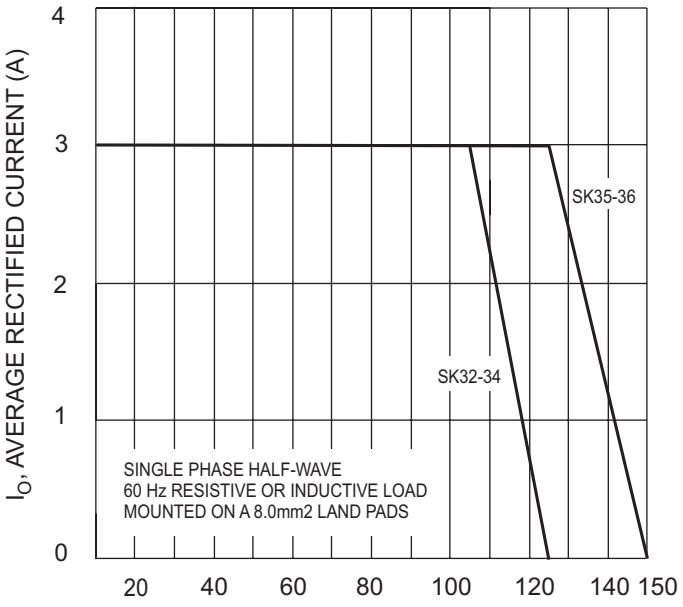


Fig. 1 Forward Derating Curve

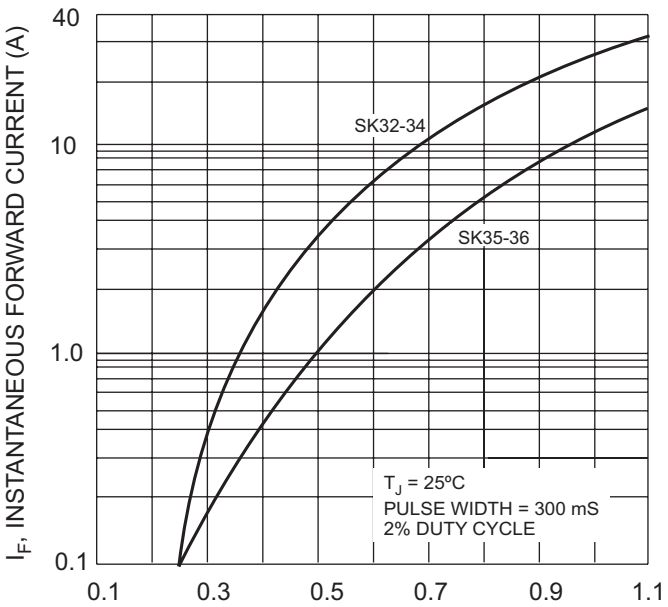


Fig. 2 Typical Forward Characteristics

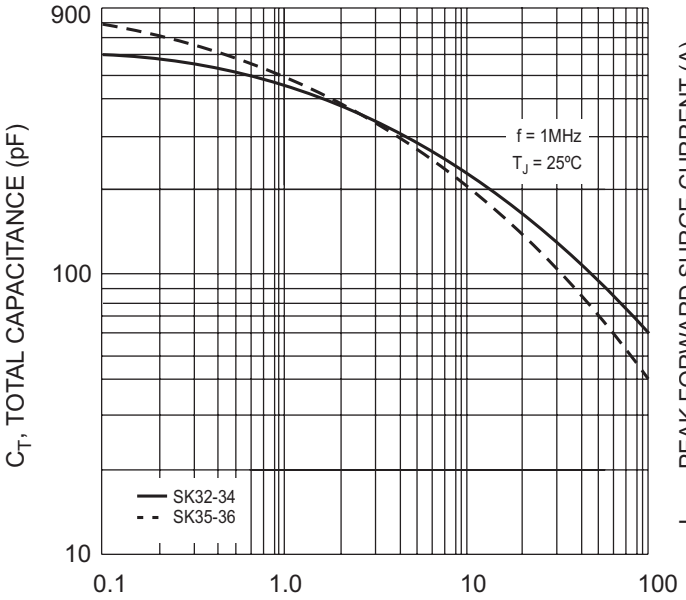


Fig. 3 Typical Total Capacitance

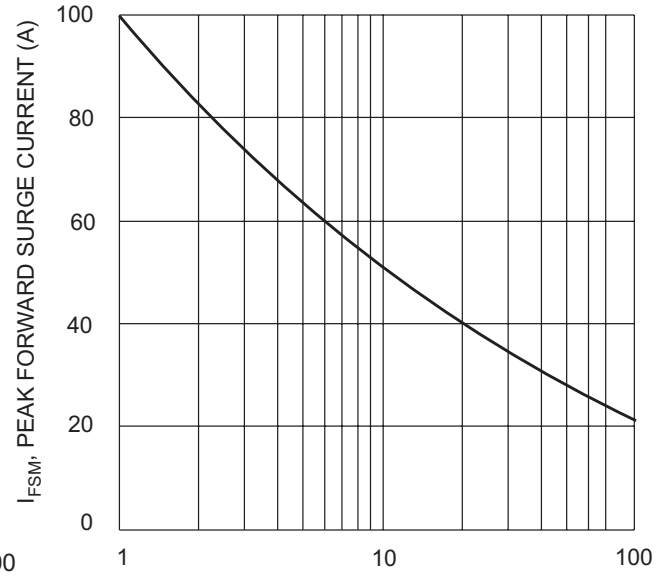


Fig. 4 Maximum Non-Repetitive Peak Forward Surge Current

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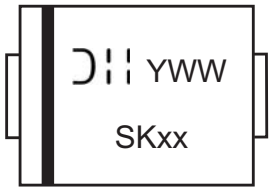
Ordering Information (Note 4 & 5)

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

Notes: 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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