



SK12 - SK16

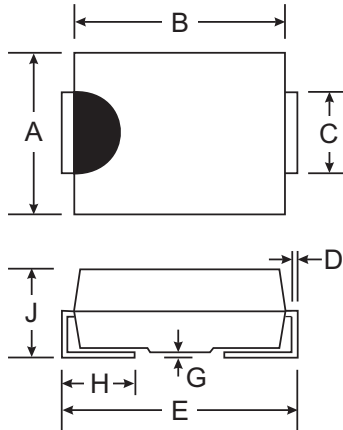
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Capable of Meeting Environmental Standards of MIL-STD-19500
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath

Mechanical Data

- Case: SMB, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Notch
- Approx. Weight: 0.093 grams
- Mounting Position: Any



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.00	4.65
C	1.95	2.21
D	0.15	0.40
E	5.00	6.00
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

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

Characteristic	Symbol	SK12	SK13	SK14	SK15	SK16	Units
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 @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0					A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25					A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	0.55			0.70		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_R	0.5 10					mA
Maximum Full Load Reverse Current Full Cycle Average @ $T_A = 75^\circ\text{C}$	I_R	5					mA
Maximum Thermal Resistance (See Note 1)	$R_{\theta JL}$	25					$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (See Note 2)	C_J	110					pF
Operating Temperature Range	T_J	-65 to +125					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150					$^\circ\text{C}$

- Notes: 1. Thermal resistance from junction to lead.
2. Measured at 1.0MHz and applies reverse voltage of 4.0V.

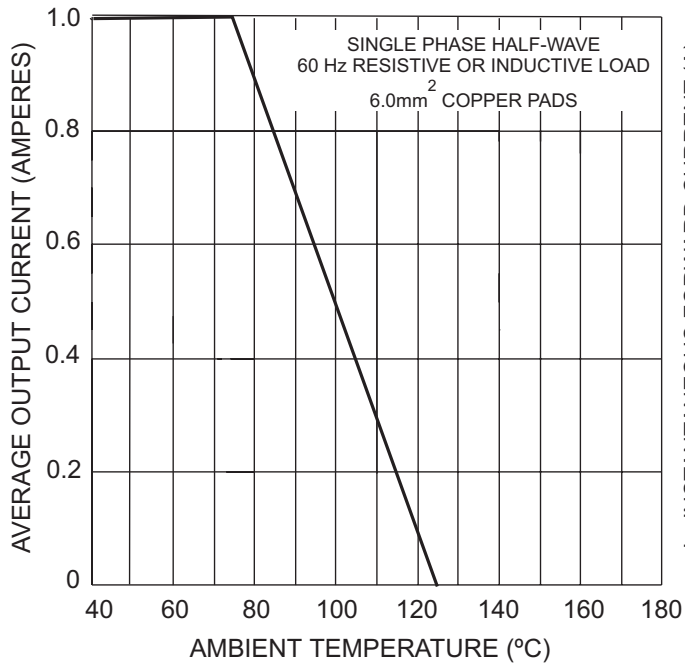


Fig. 1, Forward Current Derating Curve

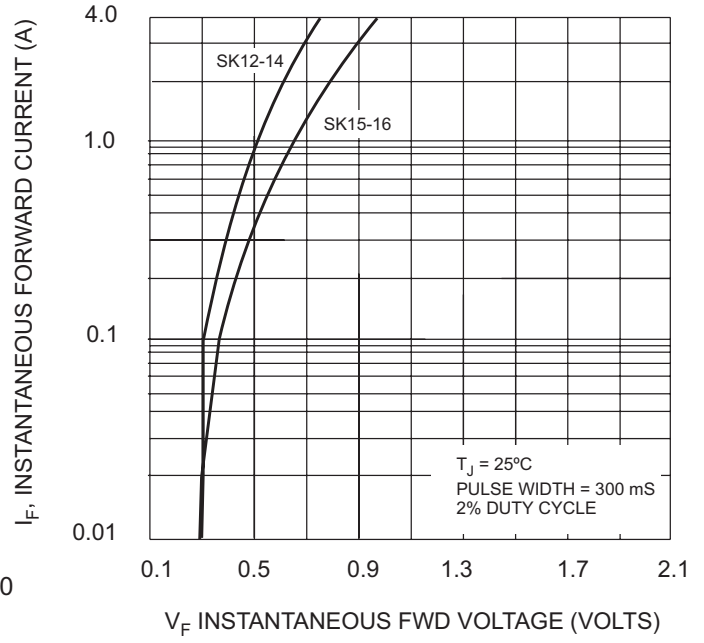


Fig. 2, Typical Forward Characteristics

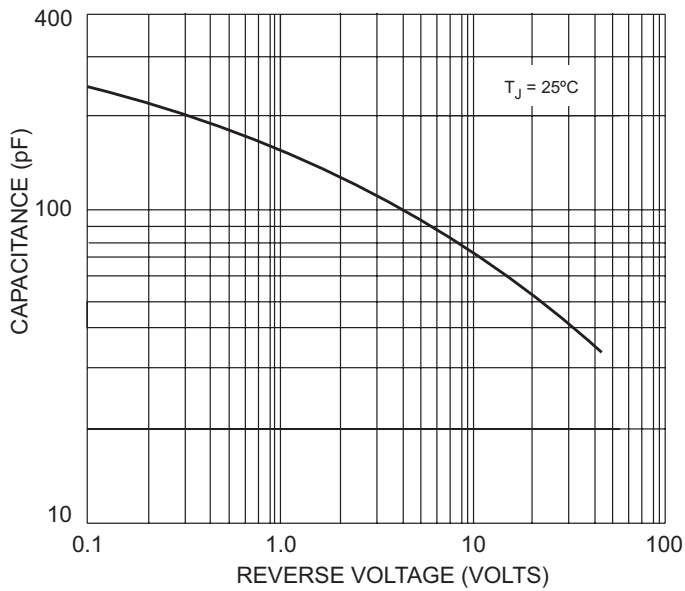


Fig. 3, Typical Junction Capacitance

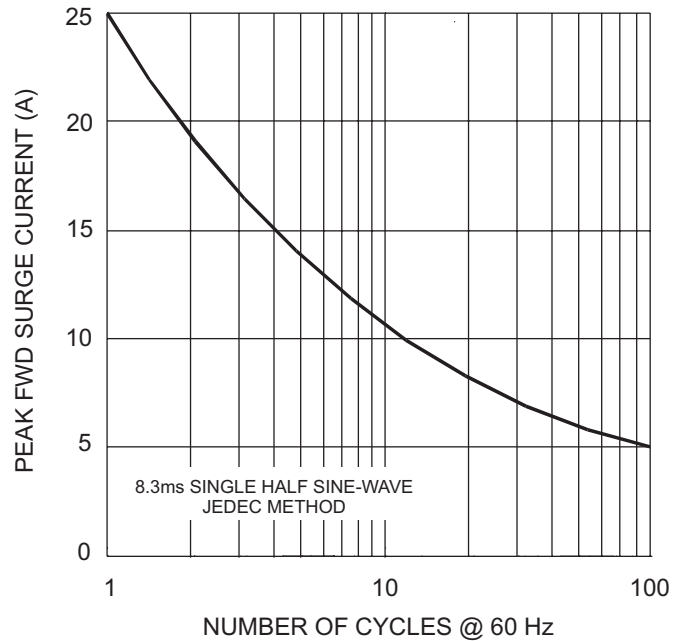


Fig. 4, Max Non-Repetitive Peak Fwd Surge Current