

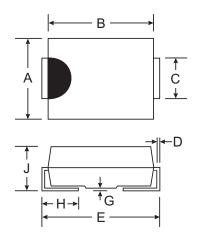
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- NOT RECOMMENDED FOR NEW DESIGNS -Use B1x0B Series
- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Capable of Meeting Environmental Standards of MIL-STD-19500
- High Reliability
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath
- Available in Lead Free Finish/RoHS Compliant Version (Note 3)

Mechanical Data

- Case: SMB
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 5, on Page 3
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Notch
- Approx. Weight: 0.093 grams



SMB						
Dim	Min	Max				
Α	3.30	3.94				
В	4.00	4.65				
С	1.95	2.21				
D	0.15	0.40				
E	5.00	6.00				
G	0.10	0.20				
Н	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°C	I _(AV)	1.0					Α
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25					Α
Maximum Instantaneous Forward Voltage at 1.0A	VF		0.55		0.	70	V
	I _R	0.5 10			mA		
Maximum Full Load Reverse Current Full Cycle Average $@ T_A = 75^{\circ}C$	I _R	5				mA	
MaximumThermal Resistance (See Note 1)	$R_{\theta JL}$	25				°C/W	
Typical Total Capacitance (See Note 2)	Ст	110				pF	
Operating Temperature Range	TJ	-65 to +125				°C	
Storage Temperature Range	T _{STG}	-65 to +150				°C	

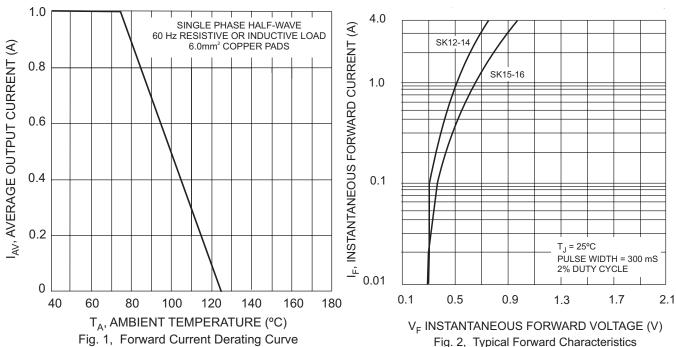
Notes:

- 1. Thermal resistance from junction to lead.
- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V.
- 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

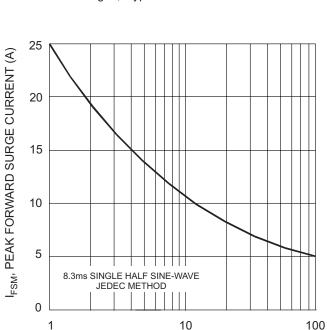


400

100



T_J = 25°C



C_T, TOTAL CAPACITANCE (pF) 10 0.1 1.0 V_R, REVERSE VOLTAGE (VOLTS) Fig. 3, Typical Total Capacitance

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

NOT RECOMMENDED FOR NEW DESIGNS -Use B1x0B Series

100



Ordering Information (Note 4)

Device	Packaging	Shipping		
SK12-13	SMB	3000/Tape & Reel		
SK13-13	SMB	3000/Tape & Reel		
SK14-13	SMB	3000/Tape & Reel		
SK15-13	SMB	3000/Tape & Reel		
SK16-13	SMB	3000/Tape & Reel		

Notes:

- 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.
- 5. For Lead Free Finish; RoHS Compliant version part numbers, please add "-F" suffix to the part numbers above. Example: SK14-13-F.

NOT RECOMMENDED FOR NEW DESIGNS - Use B1x0B Series

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by Diodes Incorporated manufacturer:

Other Similar products are found below:

MA4E2039 D1FH3-5063 MBR0530L-TP MBR10100CT-BP MBR1545CT MMBD301M3T5G RB160M-50TR RB551V-30

BAS16E6433HTMA1 BAT 54-02LRH E6327 NSR05F40QNXT5G JANS1N6640 SB07-03C-TB-H SB1003M3-TL-W SK310-T SK32A-LTP SK34B-TP SS3003CH-TL-E GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G SB007-03C-TB-E SK32A-TP SK33B-TP SK38B-TP NRVBM120LT1G NTE505 NTSB30U100CT-1G SS15E-TP ACDBA1100LR-HF ACDBA1200-HF ACDBA140-HF ACDBA2100-HF ACDBA3100-HF CDBQC0530L-HF CDBQC0240LR-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP MA4E2502L-1246 MA4E2502H-1246 NRVBM120ET1G NSR01L30MXT5G SB560 PMAD1108-LF SD103ATW-TP 1N5819T-G PDS1040Q-13 MBR3060FCTe3/TU