

**LOW VF SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **40** Volts  
FORWARD CURRENT- **2.0** Ampere

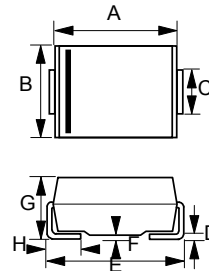
**FEATURES**

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.003 ounces, 0.093 grams

**SMB**



SMB		
DIM.	MIN.	MAX.
A	4.06	4.57
B	3.30	3.94
C	1.96	2.21
D	0.15	0.31
E	5.21	5.59
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52
All Dimensions in millimeter		

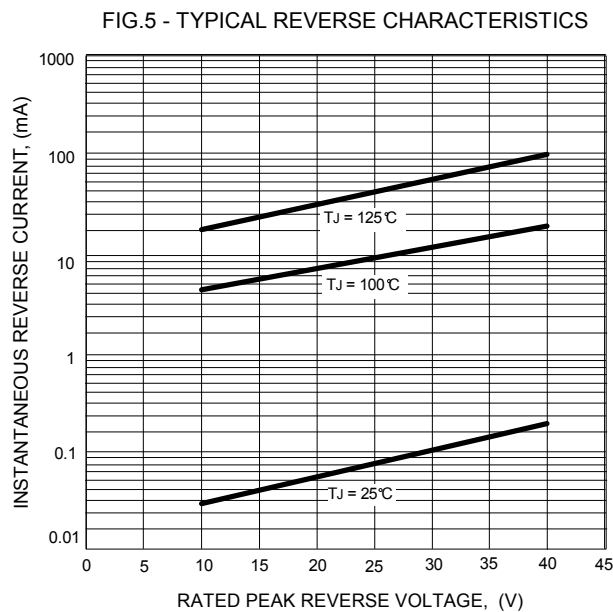
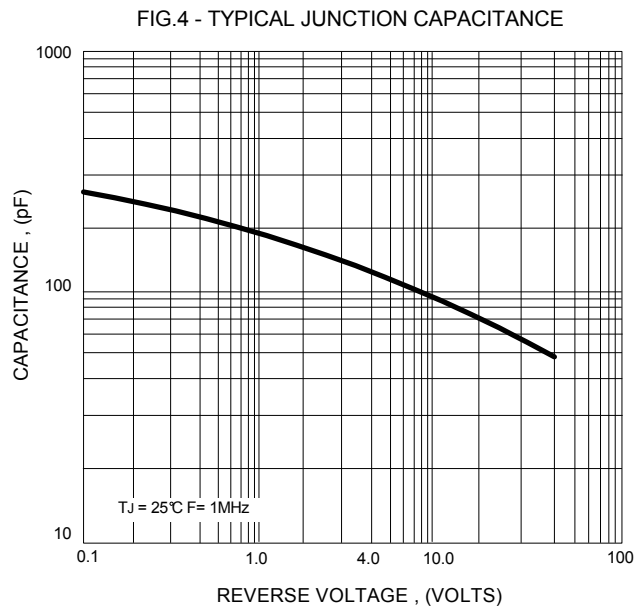
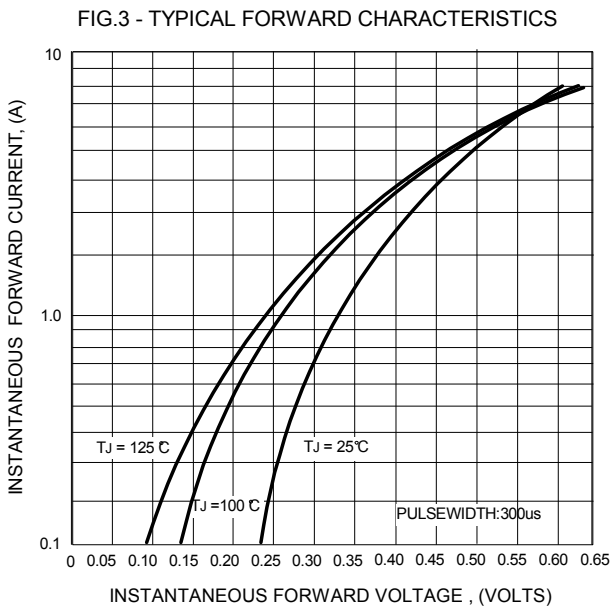
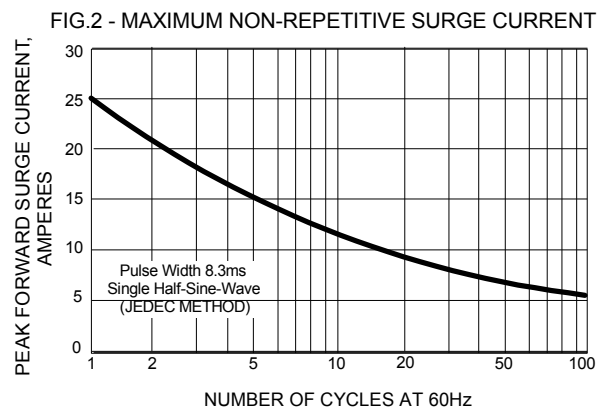
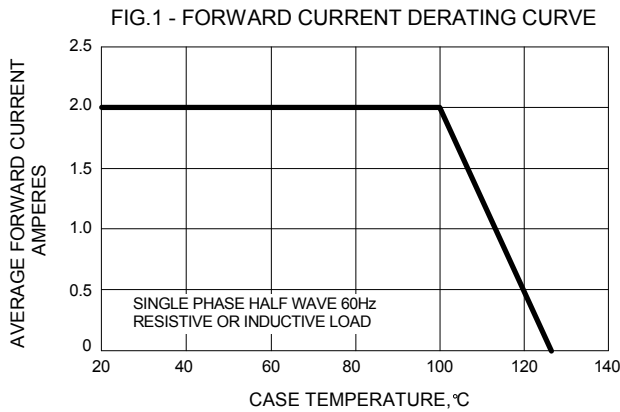
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	B240L	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Rectified Current @T <sub>C</sub> =100°C	I <sub>(AV)</sub>	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	25	A
Maximum Instantaneous Forward Voltage @ IF= 2A; T <sub>J</sub> =25°C @ IF= 2A; T <sub>J</sub> =125°C @ IF= 4A; T <sub>J</sub> =25°C @ IF= 4A; T <sub>J</sub> =125°C	V <sub>F</sub>	0.43 0.375 0.54 0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ VR= 20V; T <sub>J</sub> =25°C @ VR= 20V; T <sub>J</sub> =100°C @ VR= 40V; T <sub>J</sub> =25°C @ VR= 40V; T <sub>J</sub> =100°C	I <sub>R</sub>	0.5 40 2.0 60	mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	200	pF
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub>	18	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Thermal Resistance Junction to lead.

REV. 4, Oct-2010, KSHB11



## Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.