

**SURFACE MOUNT  
SUPER FAST RECTIFIERS**

REVERSE VOLTAGE - **400 to 200** Volts  
FORWARD CURRENT - **1.0** Ampere

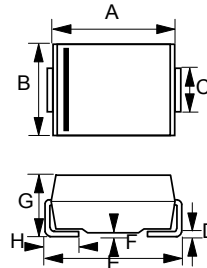
**FEATURES**

- Glass passivated chip
- Super fast switching for high efficiency
- For surface mounted applications
- Low forward voltage drop and high current capability
- Low reverse leakage current

**MECHANICAL DATA**

- Case : Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity : Color band denotes cathode
- Weight : 0.003 ounces, 0.093 grams
- Marking : U1GB , U1JB

**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

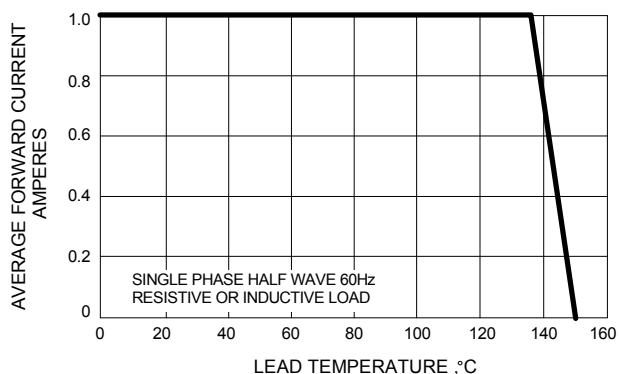
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

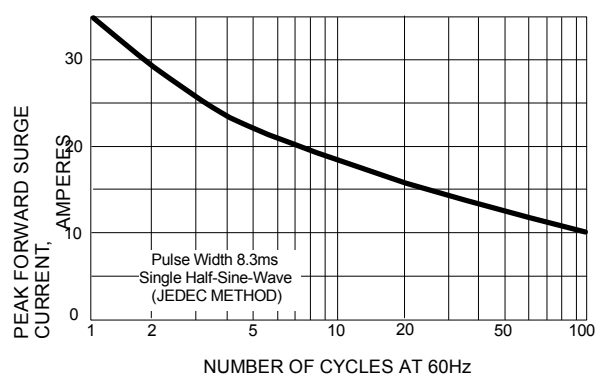
| CHARACTERISTICS   | SYMBOL           | MURS140     | MURS160 | UNIT |
|---|------------------|-------------|---------|------|
| Maximum Recurrent Peak Reverse Voltage  | VRRM             | 400         | 600     | V    |
| Maximum RMS Voltage   | VRMS             | 280         | 420     | V    |
| Maximum DC Blocking Voltage   | VDC              | 400         | 600     | V    |
| Maximum Average Forward Rectified Current @TL =135°C  | I(AV)            | 1.0         |         | A    |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD) | IFSM             | 35          |         | A    |
| Maximum forward Voltage at 1.0A DC  | VF               | 1.25        |         | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25°C @TJ =150°C                      | IR               | 5.0         | 150     | uA   |
| Maximum Reverse Recovery Time (Note 1)  | T <sub>RR</sub>  | 50          |         | ns   |
| Typical Junction Capacitance Note 2)  | C <sub>J</sub>   | 10          |         | pF   |
| Typical Thermal Resistance (Note 3)   | R <sub>θJL</sub> | 15          |         | °C/W |
| Operating Temperature Range   | T <sub>J</sub>   | -55 to +150 |         | °C   |
| Storage Temperature Range   | T <sub>STG</sub> | -55 to +175 |         | °C   |

- NOTES : 1. Reverse Recovery Test Conditions :IF=0.5A,IR=1.0A,IRR=0.25A.  
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3. Thermal Resistance junction to Lead.

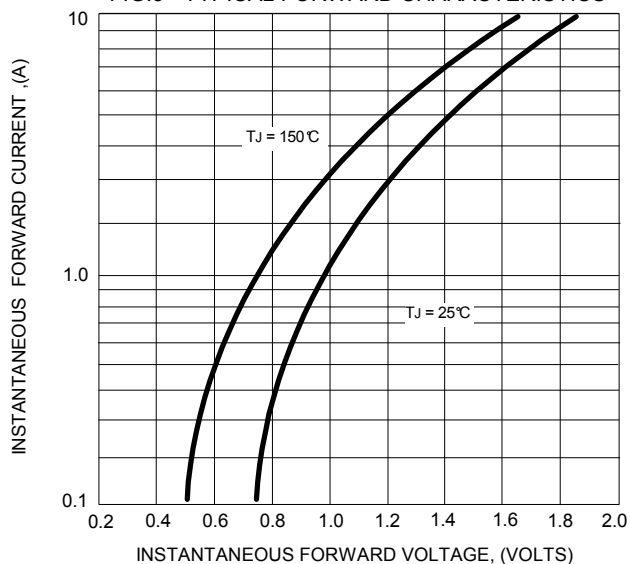
**FIG.1 - FORWARD CURRENT DERATING CURVE**



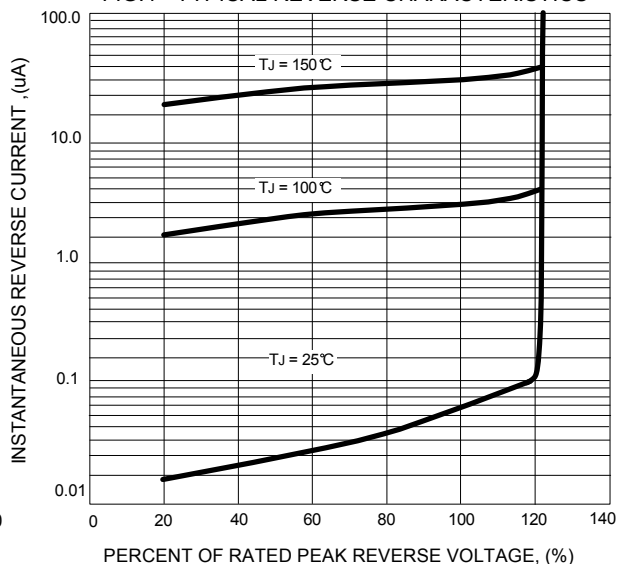
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**



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