

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

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

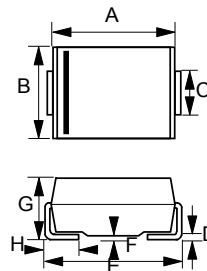
FEATURES

- 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	V _{RRM}	400	600	V
Maximum RMS Voltage	V _{RMS}	280	420	V
Maximum DC Blocking Voltage	V _{DC}	400	600	V
Maximum Average Forward Rectified Current @T _L =135°C	I _(AV)	1.0		A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I _{FSM}	35		A
Maximum forward Voltage at 1.0A DC	V _F	1.25		V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =150°C	I _R	5.0 150		uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50		ns
Typical Junction Capacitance Note 2)	C _J	10		pF
Typical Thermal Resistance (Note 3)	R _{θJL}	15		°C/W
Operating Temperature Range	T _J	-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +175		°C

NOTES : 1. Reverse Recovery Test Conditions : I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance junction to Lead.

REV. 3, Aug-2014, KSGB08

FIG.1 - FORWARD CURRENT DERATING CURVE

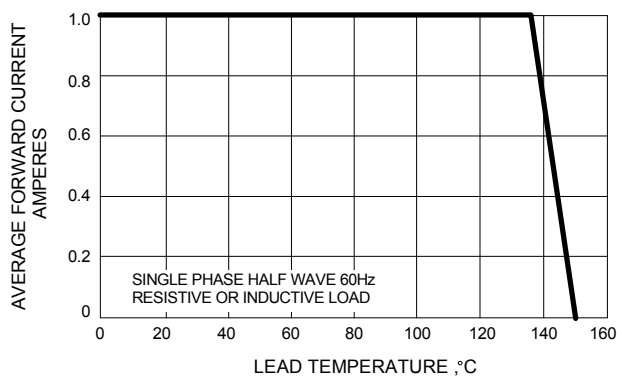


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

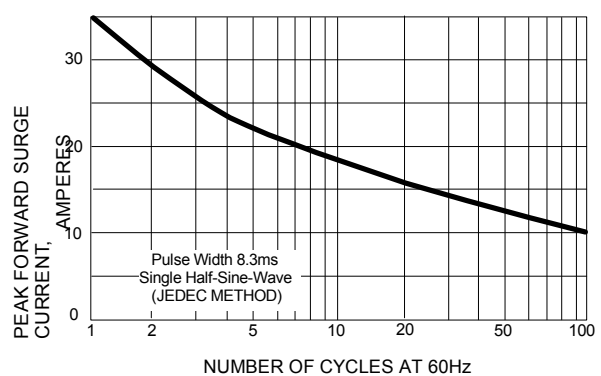


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

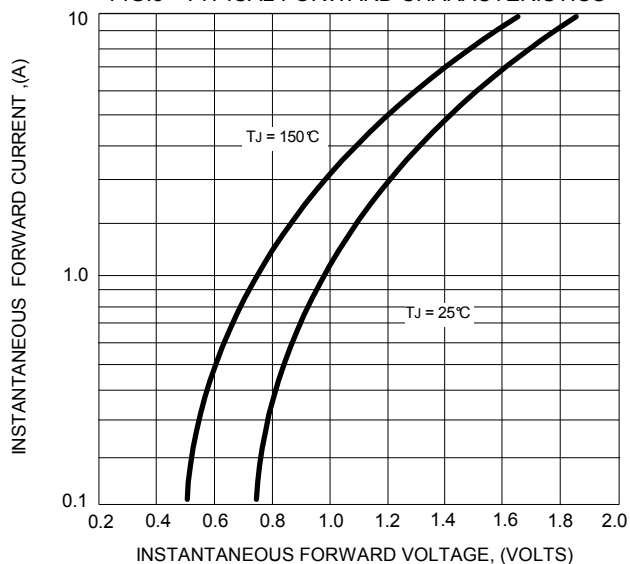
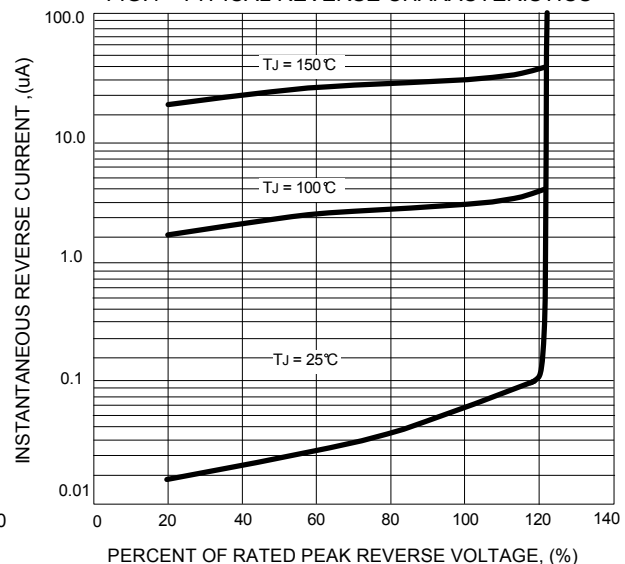


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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