

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

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

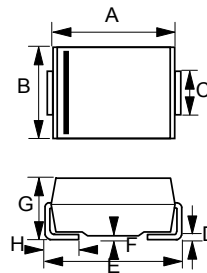
FEATURES

- 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 : U1DB

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	MURS120	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	V
Maximum RMS Voltage	VRMS	140	V
Maximum DC Blocking Voltage	VDC	200	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	40	A
Maximum forward Voltage at 1.0A DC	VF	0.875	V
Maximum DC Reverse Current @TJ =25°C at Rated DC Blocking Voltage @TJ =150°C	IR	2.0 50	uA
Maximum Reverse Recovery Time (Note 1)	TRR	25	ns
Typical Junction Capacitance (Note 2)	CJ	27	pF
Typical Thermal Resistance (Note 3)	RθJL	15	°C/W
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-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.

REV.3, Aug-2014, KSGB07

FIG.1 - FORWARD CURRENT DERATING CURVE

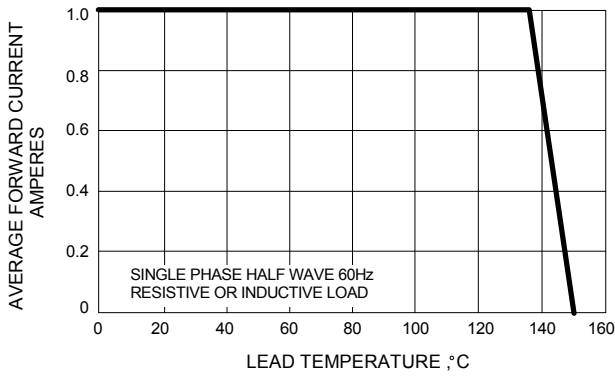


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

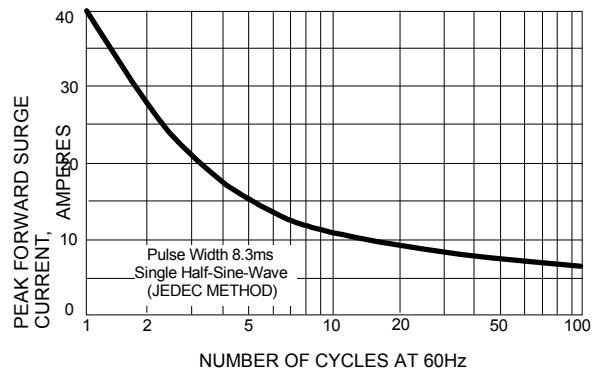


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

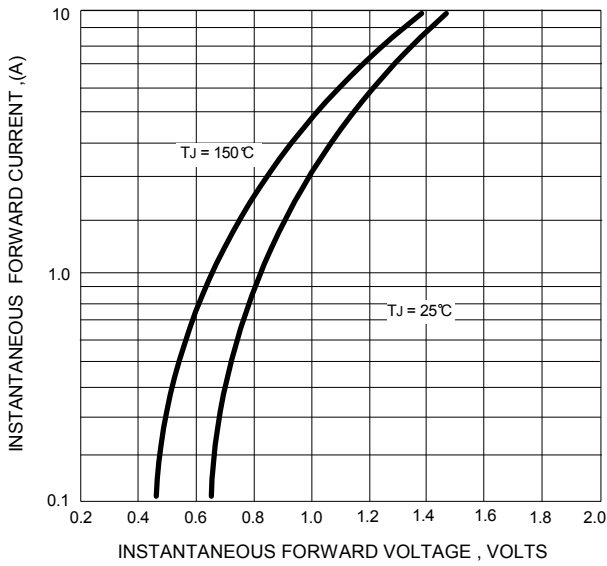
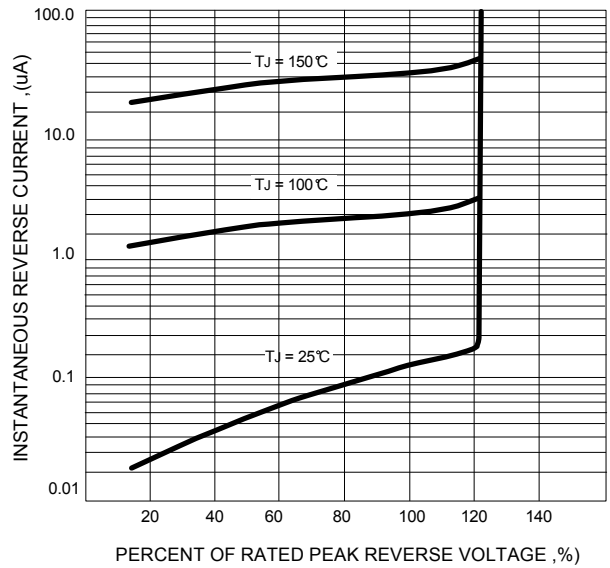


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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.