

<b>SURFACE MOUNT SUPER FAST RECTIFIERS</b>	<b>REVERSE VOLTAGE – 600 Volts</b>
	<b>FORWARD CURRENT – 3.0 Amperes</b>

**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
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.)
- Polarity: Color band denotes cathode
- Weight: 0.01 ounces, 0.249 grams (Approximate)
- Marking Code: U3J

**SMC**

SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52

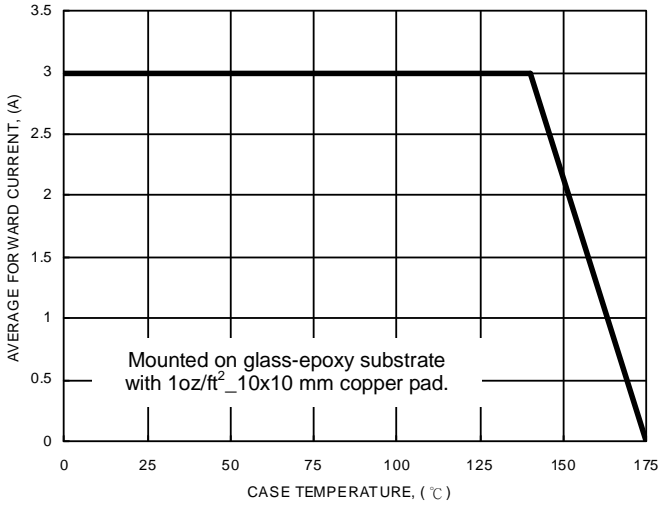
All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
 Ratings at 25°C ambient temperature unless otherwise specified.

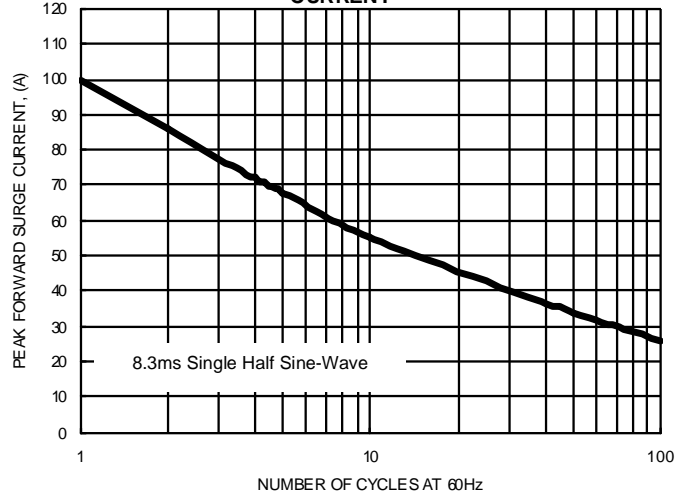
CHARACTERISTICS	SYMBOL	MURS360	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum DC Blocking Voltage	$V_{DC}$	600	A
Maximum Average Forward Rectified Current @ $T_C=140^\circ C$	$I_{AV}$	3.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100	A
Maximum Forward Voltage at 3.0A DC	$V_F$	1.25	V
Maximum DC Reverse Current @ $T_j=25^\circ C$ at Rated DC Blocking Voltage @ $T_j=150^\circ C$	$I_R$	3.0 150	uA
Maximum Reverse Recovery time ( $I_F=0.5A$ , $I_R=1.0A$ , $I_{RR}=0.25A$ )	$t_{rr}$	50	ns
Single pulse avalanche energy @ 15mH	$E_{AS}$	10.8	mJ
Typical Junction Capacitance (Note 1)	$C_j$	40	pF
Typical Thermal Resistance (Note 2, 3)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	10 16 48	$^\circ C/W$
Operating Junction Temperature Range	$T_j$	-55 to +175	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to +175	$^\circ C$

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC...  
 (2) Thermal Resistance Junction to Case, Lead and Ambient.  
 (3) Unit mounted on glass epoxy substrate 1oz/ft, 10 mmx10 mm copper pad.

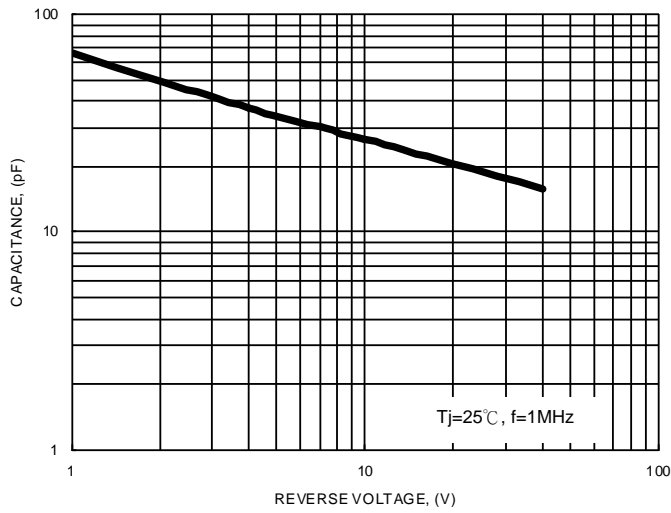
**FIG.1- FORWARD CURRENT DERATING CURVE**



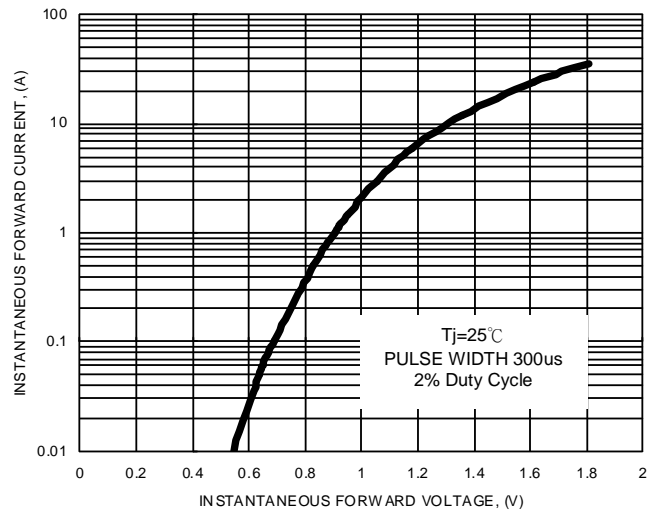
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



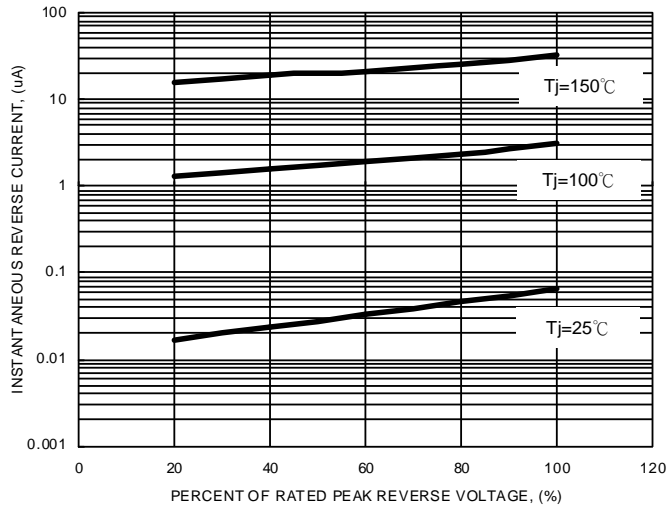
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**



**FIG.5- 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.