

## SURFACE MOUNT SUPER FAST RECTIFIERS

**REVERSE VOLTAGE** – **600 Volts**  
**FORWARD CURRENT** – **3.0 Amperes**

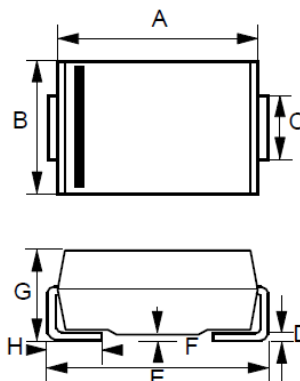
### FEATURES

- 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
- Qualified according to JEDEC
- Plastic material has UL flammability classification 94V-0
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

### MECHANICAL DATA

- Package 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	$\mu A$
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 4)	$C_j$	40	pF
Typical Thermal Resistance (Note 5, 6)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	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	$^{\circ}C$

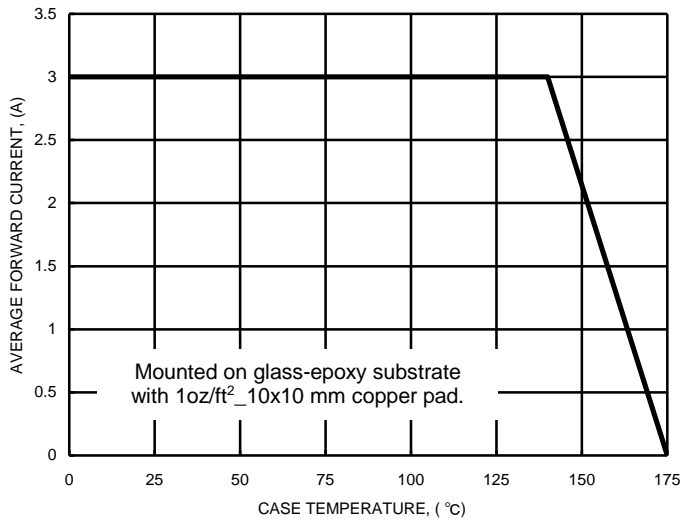
Note:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC...
5. Thermal Resistance Junction to Case, Lead and Ambient.
6. Unit mounted on glass epoxy substrate 1oz/ft, 10 mmx10 mm copper pad.

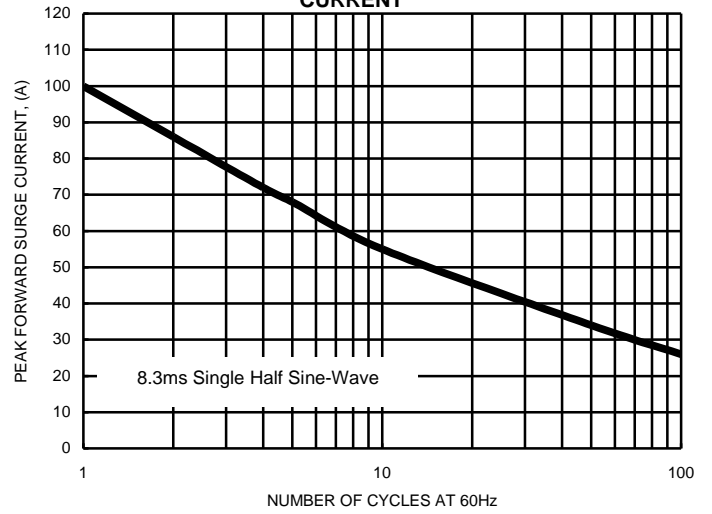
REV.-5, Oct-2021, KSGC07

**RATING AND CHARACTERISTIC CURVES**  
**MURS360**

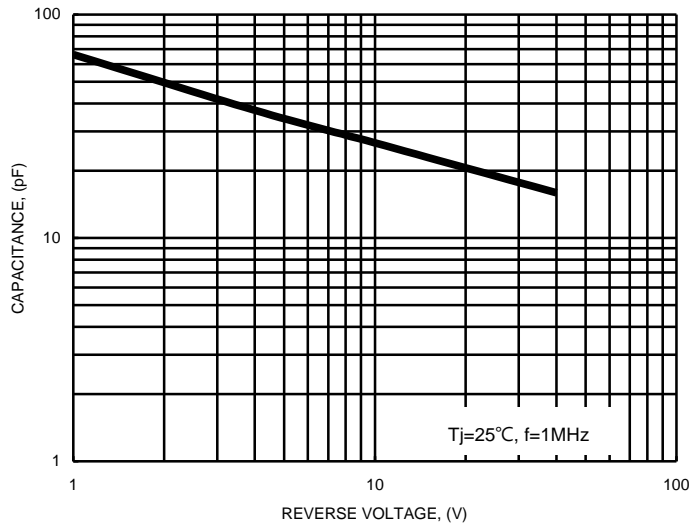
**FIG.1- FORWARD CURRENT DERATING CURVE**



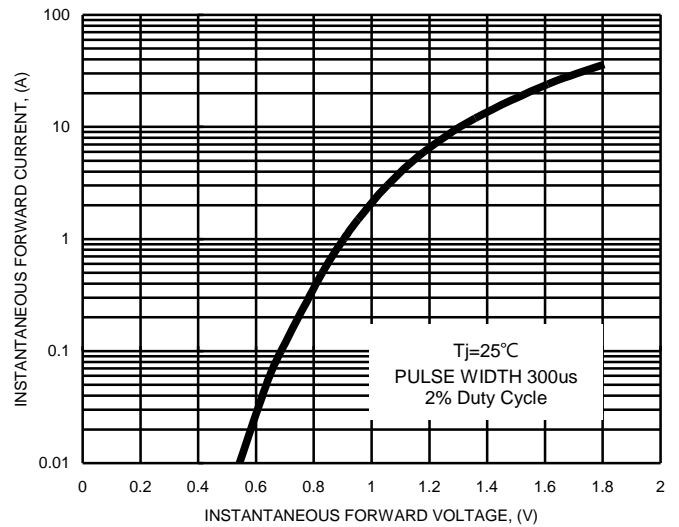
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



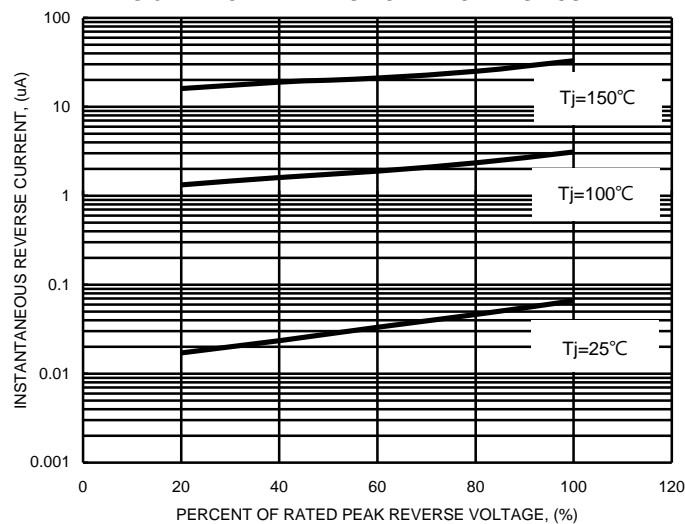
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**



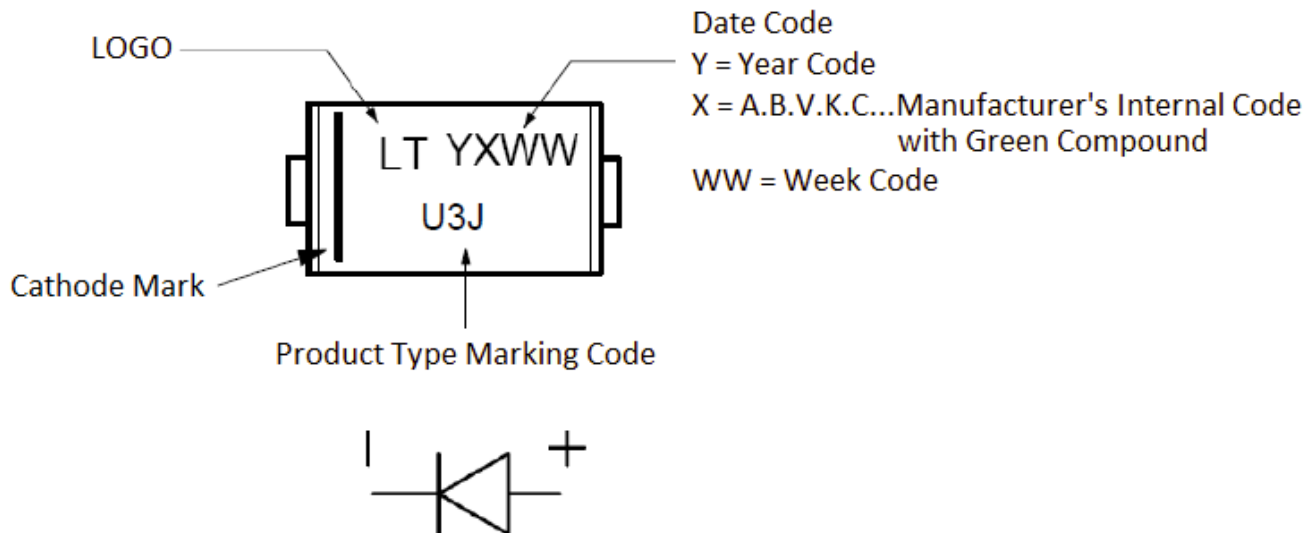
**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**Ordering Information :**

Part Number	Package	Packing	
		Qty.	Carrier
MURS360	SMC	3000	Tape & Reel

**Marking Information :**



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