

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

REVERSE VOLTAGE - **200** Volts
FORWARD CURRENT - **3.0** Amperes

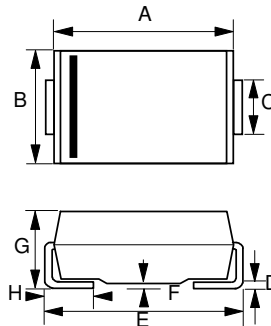
FEATURES

- Super-Fast Recovery Time For High Efficiency
- For surface mounted applications
- Plastic material has Underwriters Laboratory flammability classification 94V-0
- High temperature glass passivated junction
- Low forward voltage drop
- Qualified according to AEC-Q101 Rev_C

MECHANICAL DATA

- Case : Molded plastic
- Polarity :Color band denotes cathode
- Weight : 0.007 ounces, 0.21 grams
- Marking : U3D

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	MURS320	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=140°C	I(AV)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	IFSM	75	A
Maximum forward Voltage at IF=3.0A @TJ=25°C @TJ=150°C	VF	0.875 0.71	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=150°C	IR	5 100	uA
Maximum Reverse Recovery Time (Note 1)	TRR	25	ns
Maximum Forward Recovery Time (Note 2)	TFR	25	ns
Typical Junction Capacitance (Note 3)	CJ	45	pF
Typical Thermal Resistance (Note 4)	RθJL RθJC	11	°C/W
Operating and Storage Temperature Range	TJ;TSTG	-65 to +175	°C

NOTES : 1.Reverse Recovery Test Conditions :IF=0.5A,IR=1.0A,IRR=0.25A.

2.Reverse Recovery Test Conditions :IF = 1.0 A, di/dt = 100 A/us, Recovery to 1.0 V).

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

4.Thermal Resistance junction to Lead and Case.

REV.-4, Oct-2019, KSGC04

Please be aware that an **Important Notice and Disclaimer** concerning availability, disclaimers, and use in critical applications of LSC products thereto appears at the end of this Data Sheet.

FIG. 1 - FORWARD CURRENT DERATING CURVE

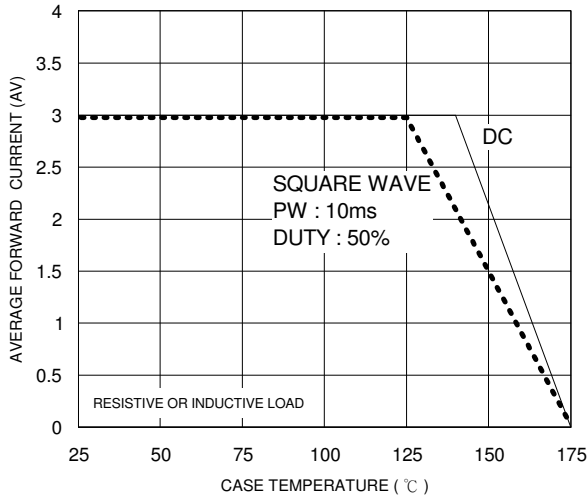


FIG. 2 - MAXMUN NON-REPETITIVE SURGE CURRENT

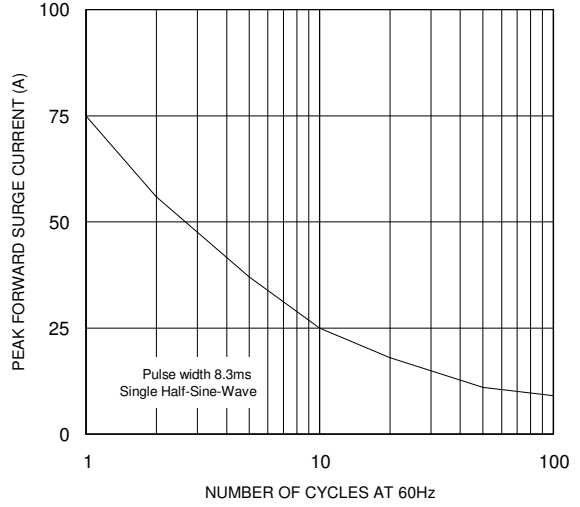


FIG. - TYPICAL JUNCTION CAPACITANCE

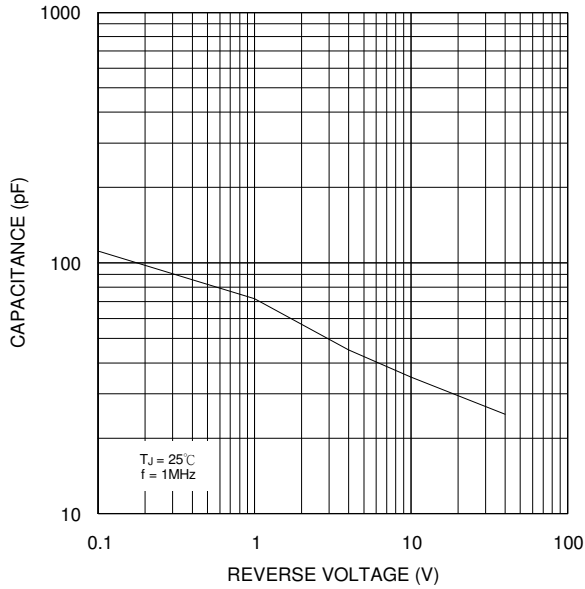


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

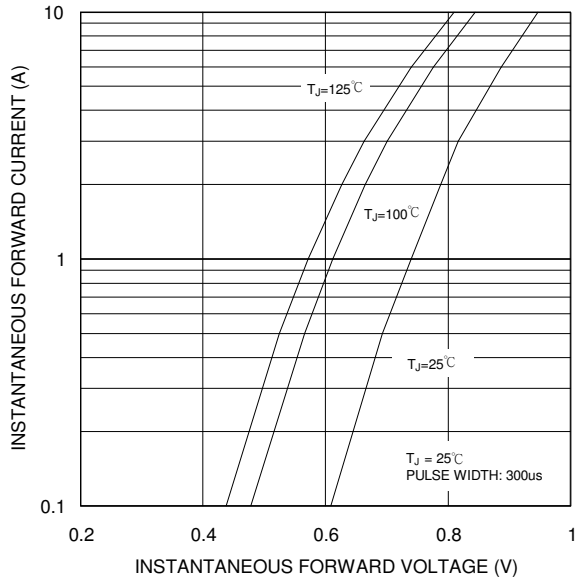
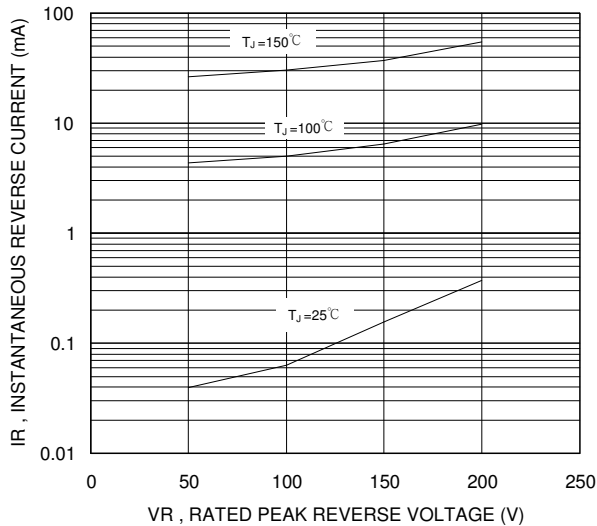


Fig.5 - TYPICAL REVERSE CHARACTERISTICS



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.

ALL INFORMATION ARE PROVIDED AS-IS, EVEN IT HAS QUALIFIED BY THE AEC-Q101 WHICH SATISFY INDUSTRIAL APPLICATION REQUIREMENT, EXCEPT AS EXPRESSLY STATED IN THIS DATA SHEET IS APPLIED FOR AUTOMOTIVE GRADE, LSC MAKE NO WARRANTIES, REPRESENTATION OR GUARANTEE, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, REGARDING ANY MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE LSC TECHNOLOGY.

LSC DOES NOT ASSUME ANY LIABILITY OR COMPENSATION FOR ANY APPLICATION ASSISTANCE OR CUSTOMER PRODUCT DESIGN, AND MAKE NO WARRANTY 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