

**ULTRA FAST
GLASS PASSIVATED RECTIFIERS**

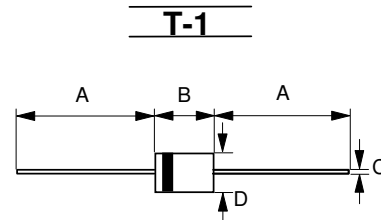
REVERSE VOLTAGE - 600 to 1000 Volts
FORWARD CURRENT - 1.0 Ampere

FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Qualified according to AEC-Q101 Rev_C
- Easily cleaned with Freon, Alcohol, Chloroethene and similar solvents
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.004 ounces, 0.13 grams
- Mounting position : Any



T-1		
Dim.	Min.	Max.
A	25.4	-
B	2.60	3.20
C	0.53 \varnothing	0.64 \varnothing
D	2.20 \varnothing	2.60 \varnothing
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	UD5G	UD6G	UD7G	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =55°C	I _(AV)	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	30			A
Maximum forward Voltage at 1.0A DC	V _F	1.7			V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	5 100			uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	75			ns
Typical Junction Capacitance (Note 2)	C _J	10			pF
Typical Thermal Resistance (Note 3)	R _{θJC} R _{θJA}	20 100			°C/W
Storage / Operating Temperature Range	T _{STG} , T _J	-55 to +150			°C

NOTES : 1. Test condition of T_{RR}: 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 Case and Ambient.

REV.-0, Oct-2019, K DFA02

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

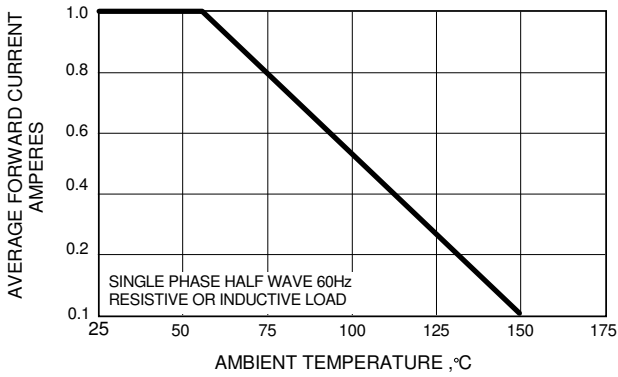


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

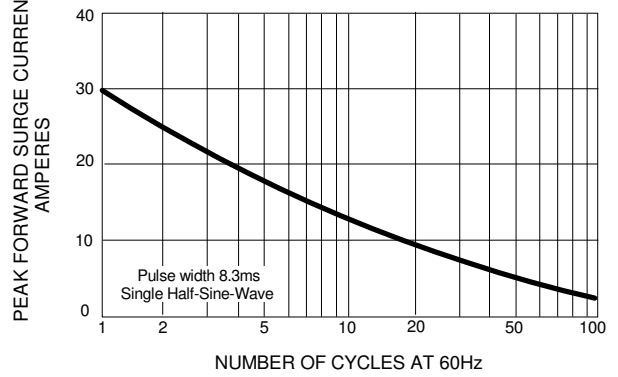


FIG.3 - TYPICAL JUNCTION CAPACITANCE

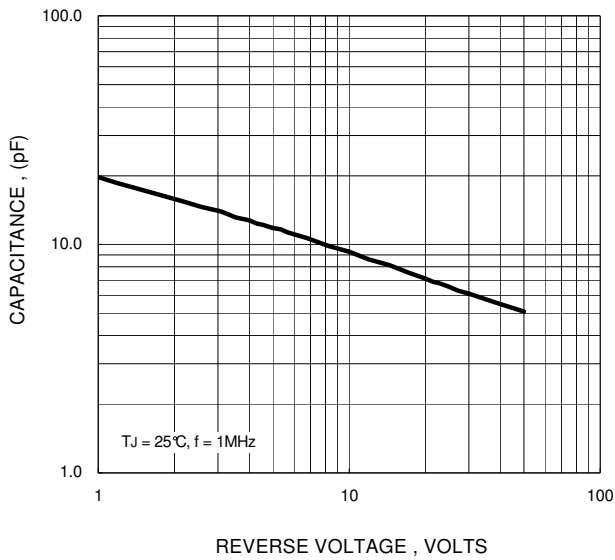


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

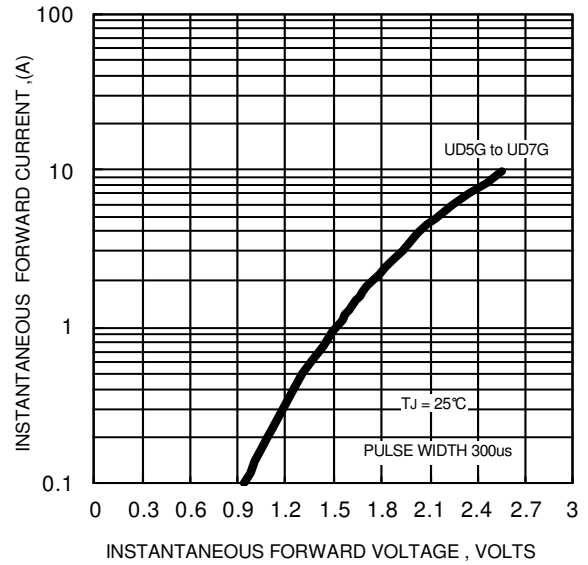
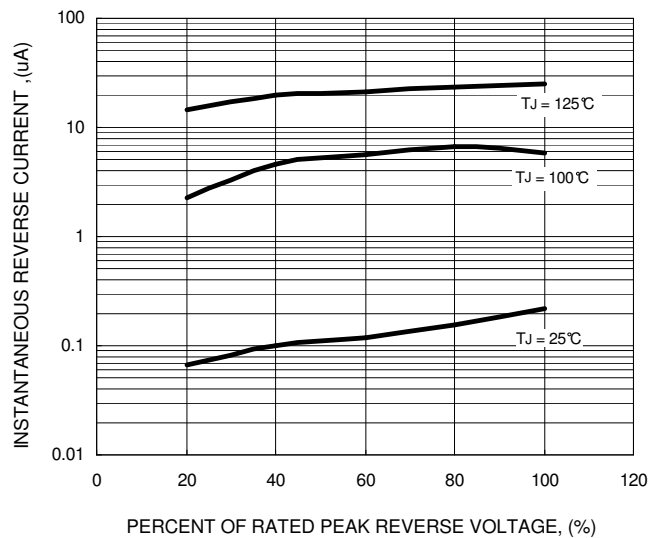


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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.

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