LITE-ON SEMICONDUCTOR

UD3G thru UD7G

ULTRA FAST
GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE **- 200** to **1000** Volts
FORWARD CURRENT **- 1.0** Ampere

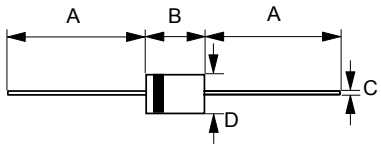
FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- Plastic material has UL flammabitily 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



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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	UD3G	UD4G	UD5G	UD6G	UD7G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A=55℃	$I_{(AV)}$	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	1.0	1.3	1.7			V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5 100					uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50		75			ns
Typical Junction Capacitance (Note 2)	C_J	10					pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$ $R_{\theta JA}$	20 100					°C/W
Storage / Operating Temperature Range	T_{STG} , T_J	-55 to +150					℃

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. 1, Sep-2010, KDFA01

RATING AND CHARACTERISTIC CURVES
UG3G thru UG7G

FIG.1 - FORWARD CURRENT DERATING CURVE

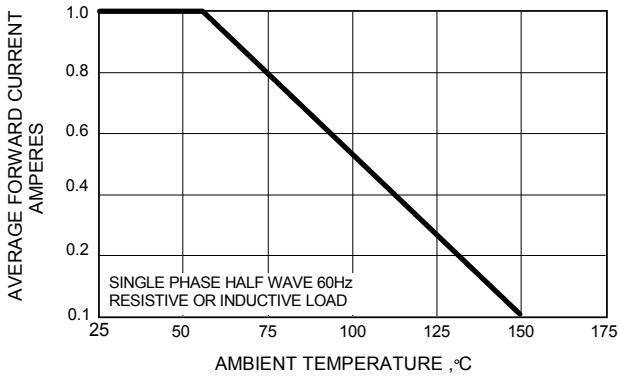


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

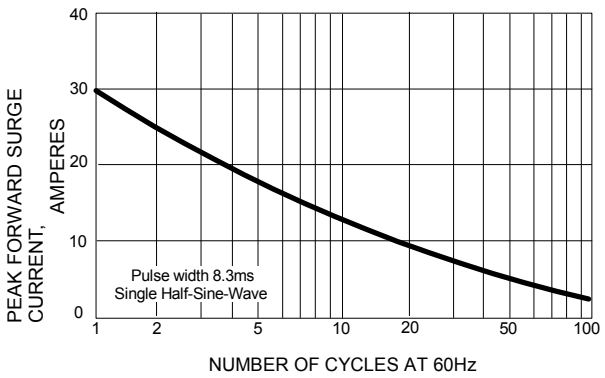


FIG.3 - TYPICAL JUNCTION CAPACITANCE

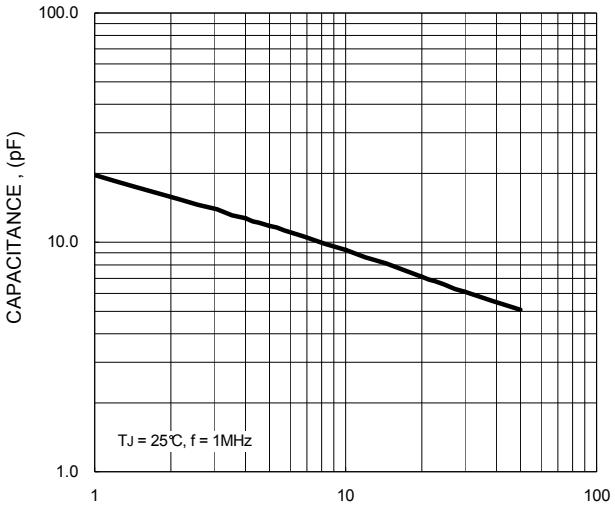


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

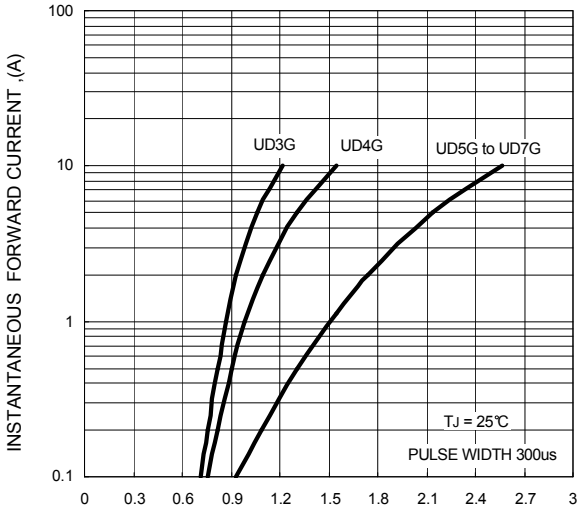
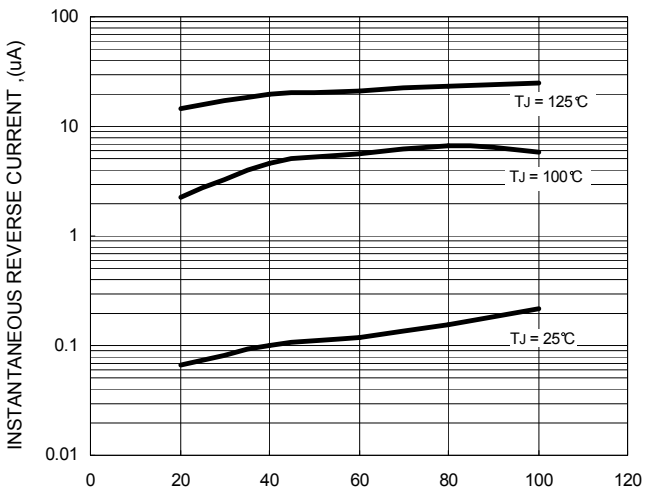


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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