LITE-ON SEMICONDUCTOR

D1G thru D7G

MINIATURE
GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 1.0** Amperes

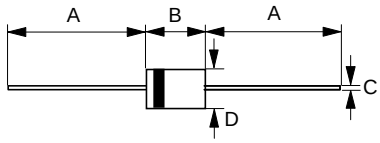
FEATURES

- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- 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



	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.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	D1G	D2G	D3G	D4G	D5G	D6G	D7G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	180	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A=75˚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	1.0							V
Maximum DC Reverse Current @T_J=25˚C at Rated DC Blocking Voltage @T_J=100˚C	I_R	5.0 50							uA
Typical Junction Capacitance (Note1)	C_J	10							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	45							˚C/W
Typical Reverse Recovery Time (Note 3)	T_{RR}	2.0							us
Operating Temperature Range	T_J	-55 to +150							˚C
Storage Temperature Range	T_{STG}	-55 to +150							˚C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Ambient.
3. Reverse Recovery Test conditions: I_F=0.5A, I_R=1A, I_{RR}=0.25A

RATING AND CHARACTERISTIC CURVES
D1G thru D7G

FIG.1 - FORWARD CURRENT DERATING CURVE

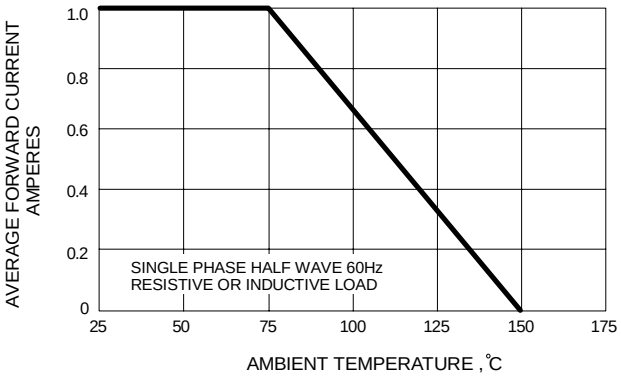


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

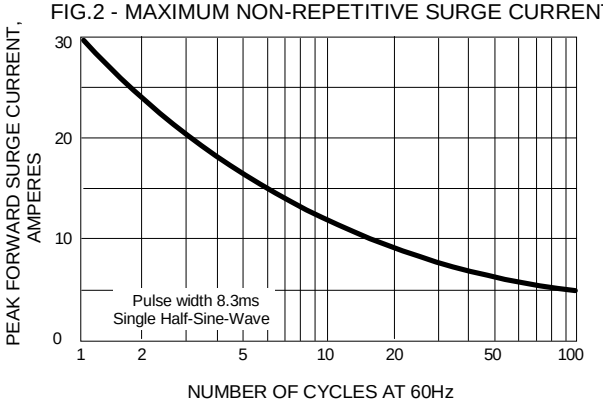


FIG.5 - TYPICAL JUNCTION CAPACITANCE

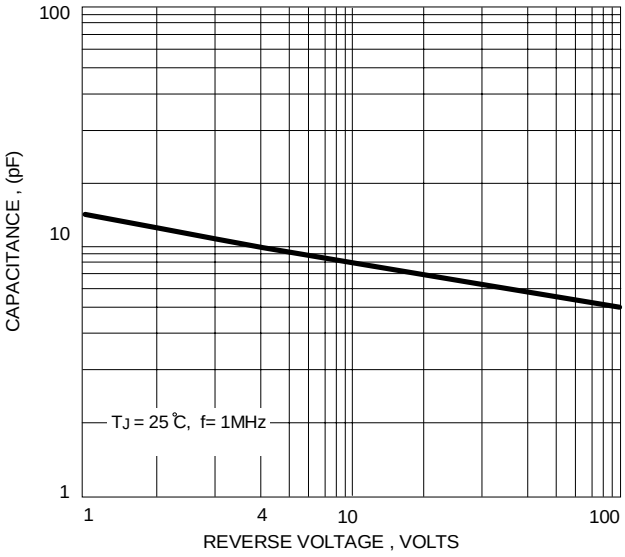


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

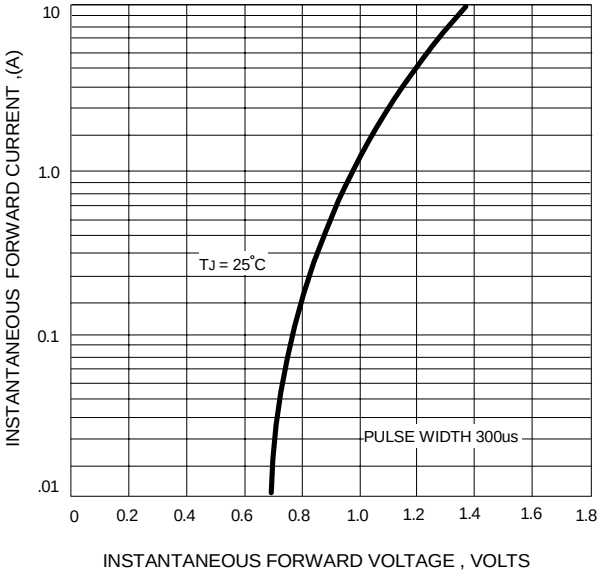


FIG.3 - TYPICAL REVERSE CHARACTERISTICS