LITE-ON SEMICONDUCTOR

LT6A01 thru LT6A07

PLASTIC SILICON RECTIFIERS

REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **6.0** Amperes

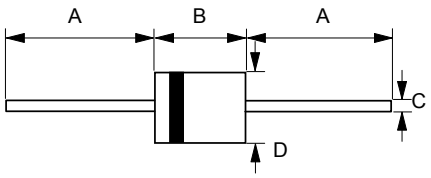
FEATURES

- **Low cost**
- **Diffused junction**
- **Low forward voltage drop**
- **Low reverse leakage current**
- **High current capability**
- **The plastic material carries UL recognition 94V-0**

MECHANICAL DATA

- Case : JEDEC R-6 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.07 ounces, 2.1 grams
- Mounting position : Any

R-6



	R-6	
Dim.	Min.	Max.
A	25.4	-
B	8.60	9.10
C	1.20 ∅	1.30 ∅
D	8.60 ∅	9.10 ∅
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	LT6A01	LT6A02	LT6A03	LT6A04	LT6A05	LT6A06	LT6A07	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	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_C=95℃ / @T_C=100℃ (Note 1)	$I_{(AV)}$	6.0 / 3.5							A
Peak Forward Surge Current 8.3ms single half sine-wave @T_J=25℃	I_{FSM}	400							A
Maximum forward Voltage at 6.0A DC	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_J=25℃ / @T_J=100℃	I_R	10 / 100							uA
Typical Junction Capacitance (Note 2)	C_J	100							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ / $R_{\theta JC}$	25 / 7							°C/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES :1. Unit Mounted on 50mm x 50mm x 1mm copper plate
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal Resistance Junction to Ambient and case

REV. 4, Oct-2010, KDAG01

RATING AND CHARACTERISTIC CURVES
LT6A01 thru LT6A07

FIG.1 - FORWARD CURRENT DERATING CURVE

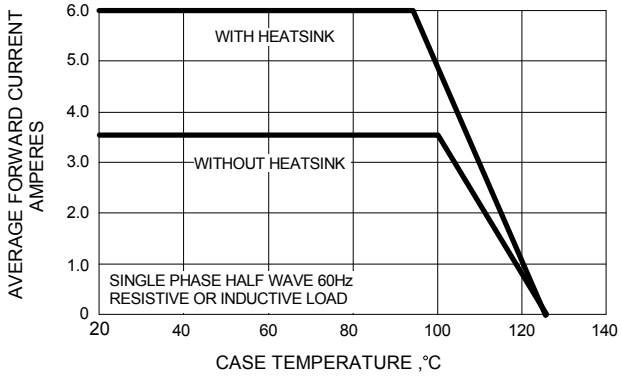


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

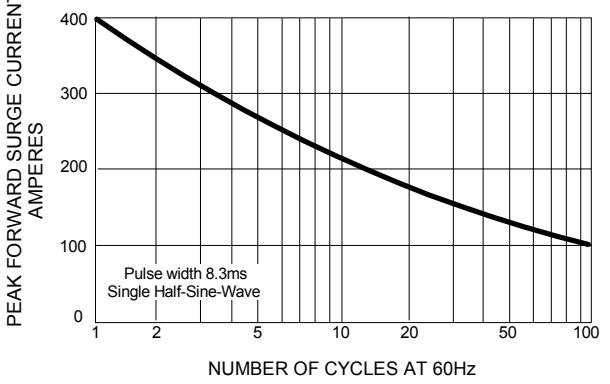


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

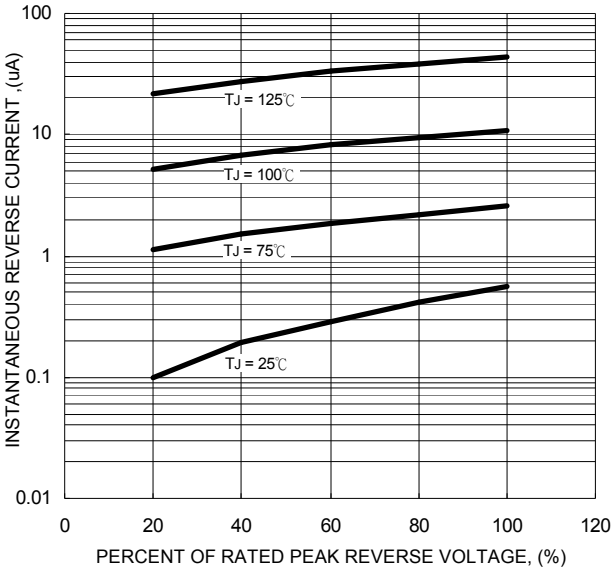


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

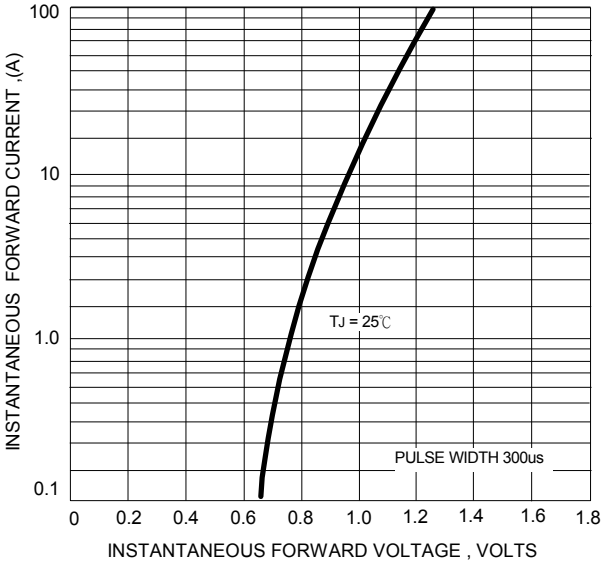
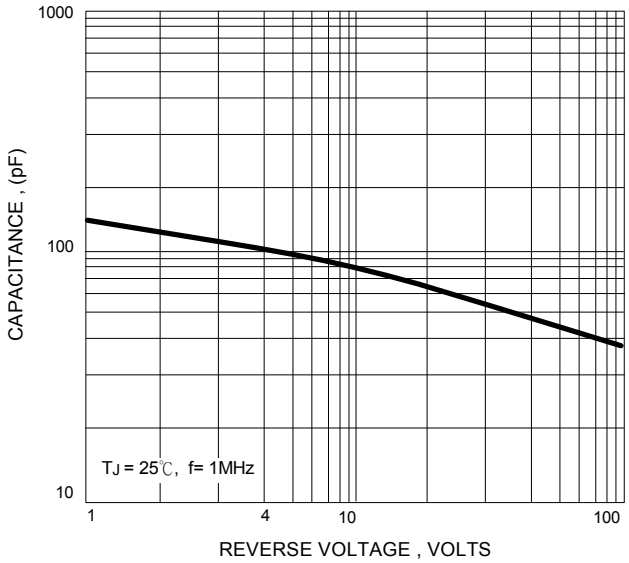


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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