

LITEON POWER SEMICONDUCTORS**LT4A01 thru LT4A07**

P-01-17

VOLTAGE RANGE
 50 to 1000 Volts
CURRENT
 4.0 Amperes
FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chloroethene and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

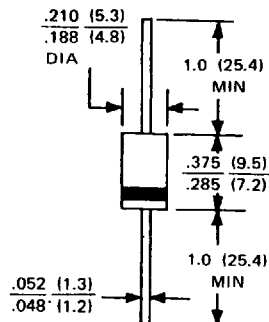
Case: JEDEC DO-201 AD molded plastic

Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Weight: 0.04 ounce, 1.1 grams

Mounting position: Any

DO-201AD

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25° C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load,

For capacitive load, derate current by 20%.

		LT4A01	LT4A02	LT4A03	LT4A04	LT4A05	LT4A06	LT4A07	UNITS
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 .500" (12.7mm) Lead Lengths @ $T_L = 90^\circ\text{C}$	$I_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3 ms single half-sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum Forward Voltage at 4.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R	10 100							μA μA
Typical Junction Capacitance (Note 1)	C_J	60				30			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-65 to +175							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +175							$^\circ\text{C}$

NOTES: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

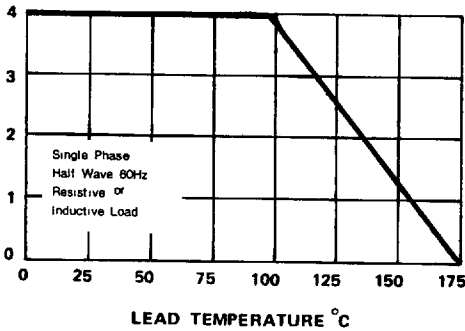
2. Thermal Resistance Junction to Ambient.

RATINGS AND CHARACTERISTIC CURVES
LT4A01 THRU LT4A07



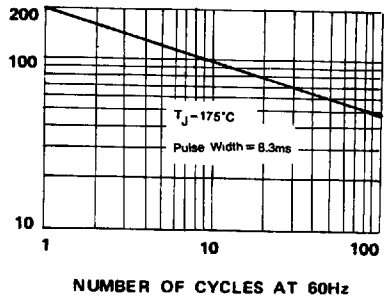
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES.

FIG. 1 - FORWARD DERATING CURVE



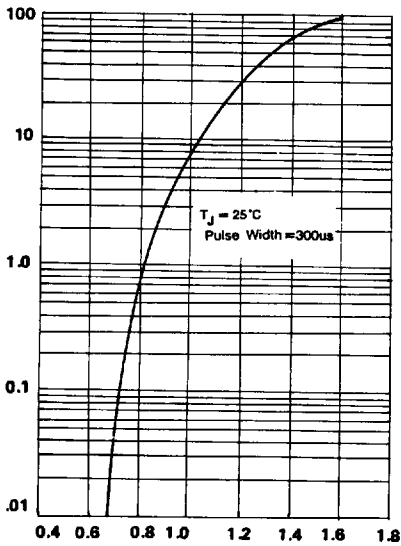
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2 - PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3 - TYPICAL FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

