

### Features

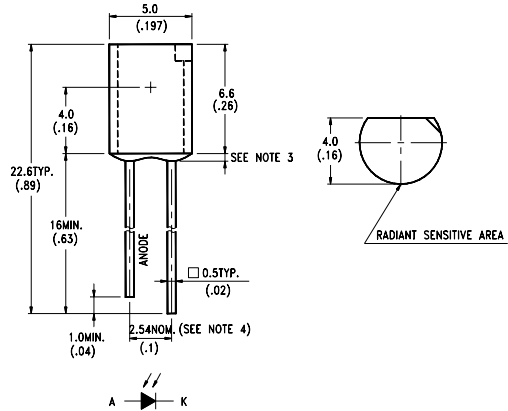
- High photo sensitivity.
- Suitable for infrared radiation.
- Low junction capacitance.
- High cut-off frequency.
- Fast switching time.

### Description

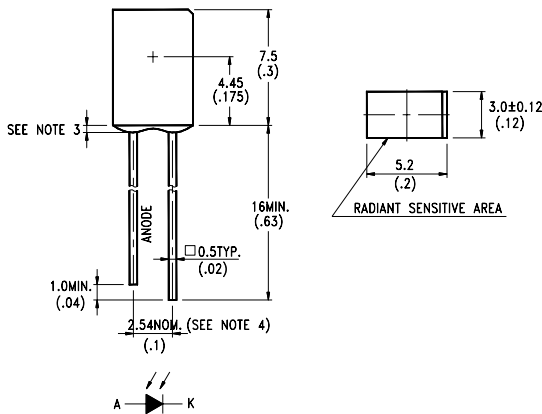
The LTR-516AD/LTR-526AD/LTR-536AD/LTR-546AD are special dark plastic package that cut the visible light and suitable for the detectors of infrared applications.

### Package Dimensions

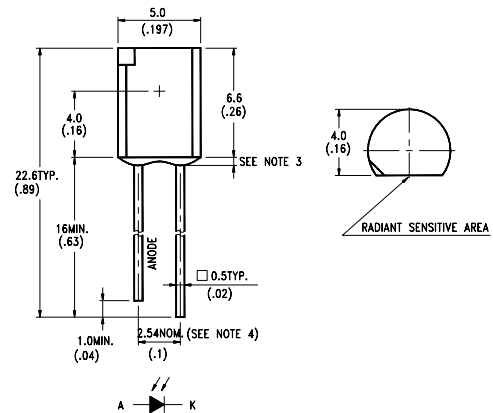
LTR-516AD



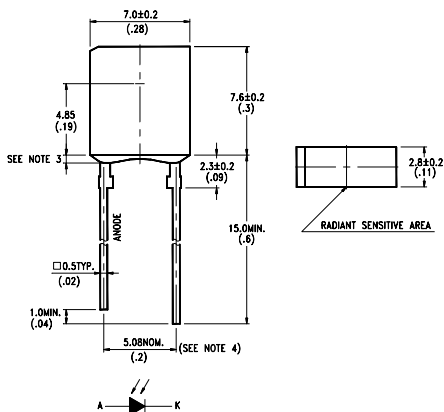
LTR-536AD



LTR-526AD



LTR-546AD



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. Protruded resin under flange is 1.5mm (.059") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

## Absolute Maximum Ratings at Ta=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	150	mW
Reverse Break Down Voltage	30	V
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature [1.6mm (.063 in.) from body]	260°C for 5 Seconds	

## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Break Down Voltage	$V_{(BR)R}$	30			V	$I_R=100 \mu A$ $E_e=0mW/cm^2$
Reverse Dark Current	$I_{D(R)}$			30	nA	$V_R=10V$ $E_e=0mW/cm^2$
Open Circuit Voltage	$V_{OC}$		350		mV	$\lambda = 940nm$ $E_e=0.5mW/cm^2$
Rise Time	$T_r$		50		nsec	$V_R=10V$ $\lambda = 940nm$ $R_L=1K \Omega$
Fall Time	$T_f$		50		nsec	
Light Current	$I_s$	1.7	2		$\mu A$	$V_R=5V$ $\lambda = 940nm$ $E_e=0.1mW/cm^2$
Total Capacitance	$C_T$		25		pF	$R=3V$ $V_f=1MHz$ $E_e=0mW/cm^2$
Wavelength of the Max Sensitivity	$\lambda_{SMAX}$		900		nm	

## Typical Electrical/Optical Characteristic Curves (25°C Ambient Temperature Unless Otherwise Noted)

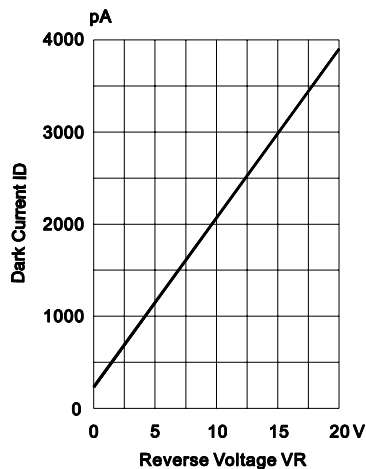


Fig.1 DARK CURRENT VS. REVERSE VOLTAGE  
TA=25 XC, Ee=0 mW/cm<sup>2</sup>

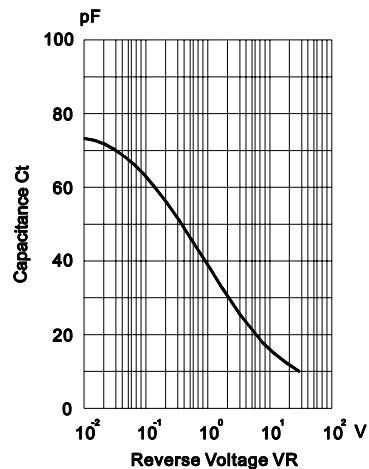


Fig.2 CAPACITANCE VS. REVERSE VOLTAGE  
F=1MHZ; Ee=0mW/cm<sup>2</sup>

# Typical Electrical/Optical Characteristic Curves (25°C Ambient Temperature Unless Otherwise Noted)

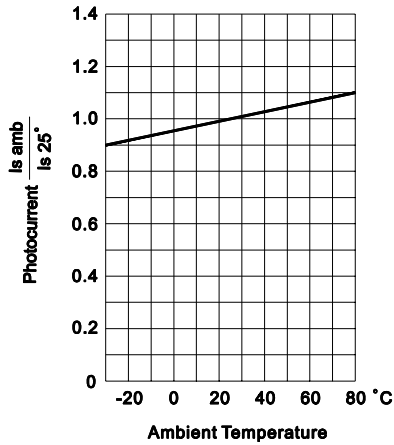


Fig.3 PHOTOCURRENT VS. AMBIENT TEMPERATURE

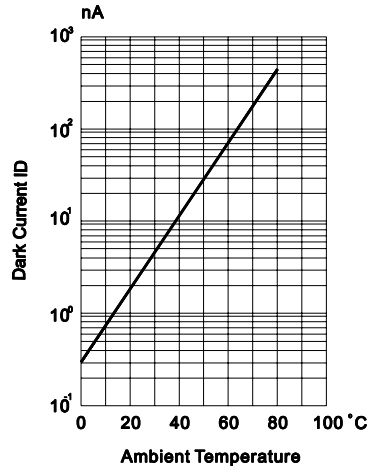


Fig.4 DARK CURRENT AMBIENT TEMPERATURE  
VR=10, Ee=0mW/cm<sup>2</sup>

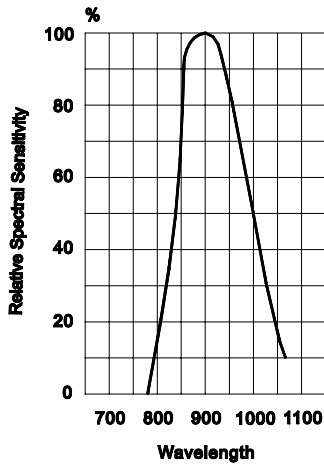


Fig.5 RELATIVE SPECTRAL SENSITIVITY VS WAVELENGTH

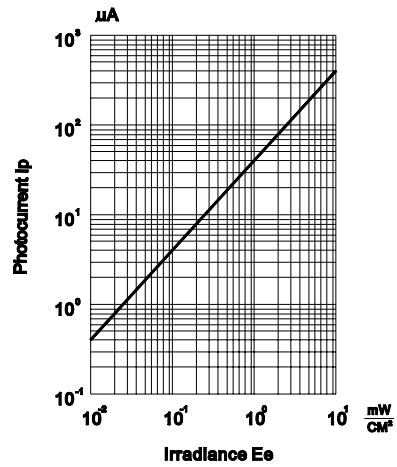


Fig.6 PHOTOCURRENT VS IRRADIANCE  $\lambda = 940 \text{ nm}$

# Typical Electrical/Optical Characteristic Curves (25°C Ambient Temperature Unless Otherwise Noted)

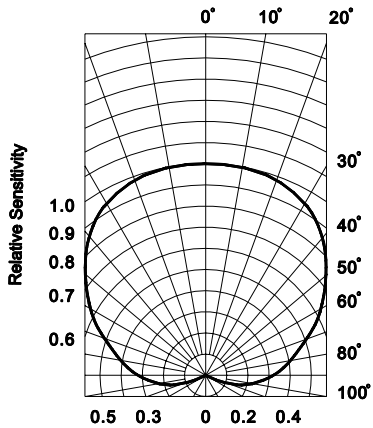


Fig.7 SENSITIVITY DIAGRAM

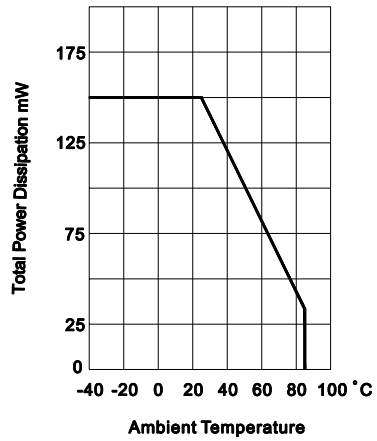


Fig.8 TOTAL POWER DISSIPATION VS AMBIENT TEMPERATURE