

INFRARED EMITTING DIODES

EVERLIGHT

T-41-11

■ INFRARED EMITTING DIODES MODEL: IR204/IR333

■ GENERAL DESCRIPTION

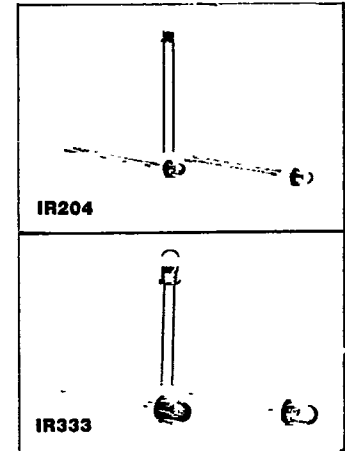
The IR204 and IR333 are high power solution grown Epitaxial Gallium Arsenide Infrared Emitting Diodes encapsulated in blue transparent plastic T-1 or T-1¼ package individually.

■ FEATURES

- High radiant intensity.
- Suitable for pulsed applications.
- Low average degradation.

■ APPLICATIONS

- Remote control.
- Automatic control system.
- Burglar alarm.
- Photo detector.
- Smoke detector.
- Computer I/O peripheral.
- Industrial use.



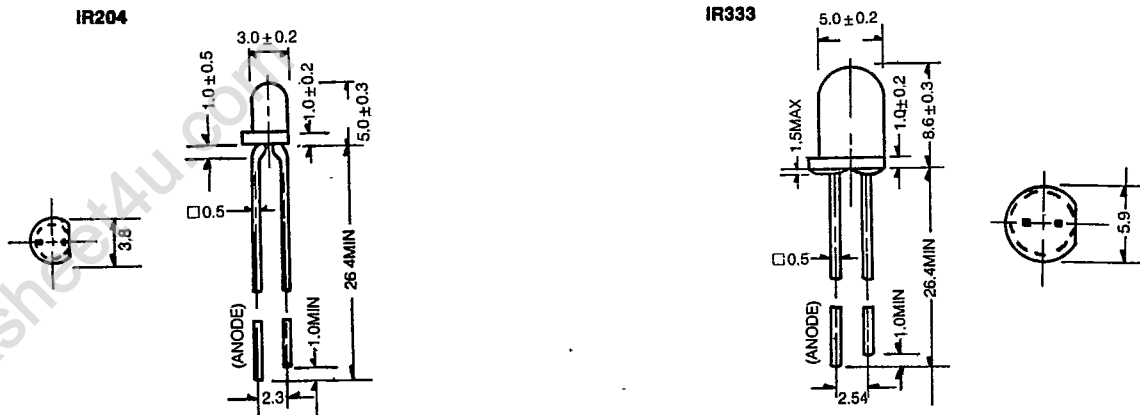
■ ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

• Continuous Forward Current.....	100mA
• Peak Forward Current (Pulse Width = 10µs, 1% duty cycle).....	1.2A
• Reverse Voltage.....	5V
• Operating Temperature Range.....	-40°C to +85°C
• Storage Temperature Range.....	-40°C to +85°C
• Lead Soldering Temperature (1/16 inch from body for 5 sec.).....	240°C
• Relative Humidity at 85°C.....	85%
• Power Dissipation at (or below) 25°C Free Air Temperature.....	150mW

■ ELECTRICAL AND RADIANT CHARACTERISTICS (T = 25°C)

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
V_F	Forward Voltage		1.3	1.7	V	$I_F = 100\text{mA}$
I_R	Reverse Leakage Current			10	µA	$V_R = 5.0\text{V}$
P_D	Radiant Power	6	10		mW	$I_F = 100\text{mA}$
λ_p	Peak Spectral Wavelength		940		nm	$I_F = 100\text{mA}$
$\Delta\lambda_p$	Spectral Bandwidth Between Half-Power		40		nm	$I_F = 100\text{mA}$
$\theta_{1/2}$	Viewing Angle to Half-Intensity		30		Deg	for IR204
			25			for IR333

■ PACKAGE DIMENSIONS



NOTE: 1. All dimensions are in millimeters. 2. Lead spacing is measured where the leads emerge from the package. 3. Protruded resin under flange 1.5 mm (0.059") Max.