

Specifications

■ INFRARED EMITTING DIODES

MODEL: SIR204/SIR333

■ GENERAL DESCRIPTION

The SIR204 and SIR333 are super-high-efficiency Gallium Aluminum Arsenide (GaAlAs) Infrared Emitting Diodes encapsulated in blue transparent plastic T-1 or T-1½ package

■ 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	$V_A = 5.0\text{V}$
P_D	Radiant Power	21	35		mW	$I_F = 100\text{mA}$
λ_p	Peak Spectral Wavelength		880		nm	$I_F = 100\text{mA}$

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-1½ package

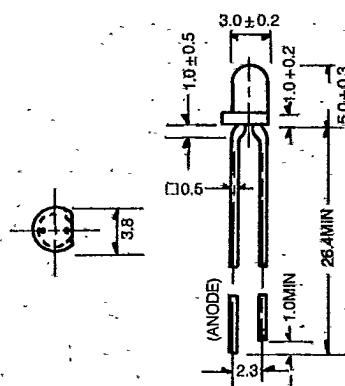
■ ELECTRICAL AND RADIANT CHARACTERISTICS (T=25°C)

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	$V_A = 5.0\text{V}$
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	$I_F = 100\text{mA}$

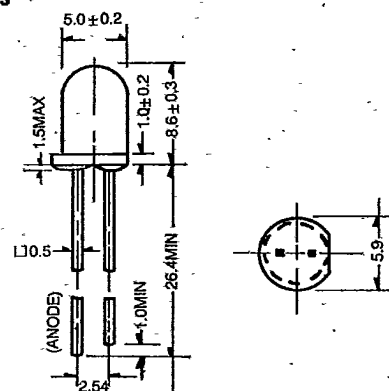
■ PACKAGE DIMENSIONS: INFRARED EMITTING DIODES

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.

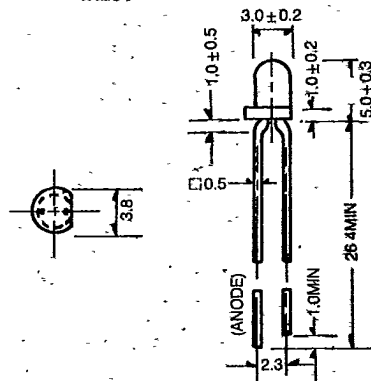
SIR204



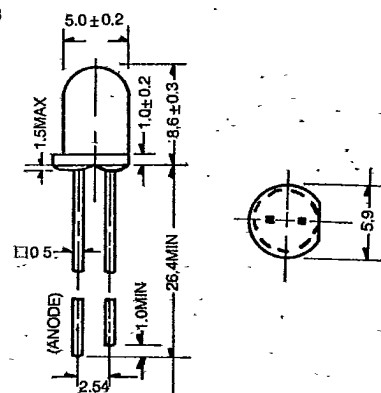
SIR333



IR204



IR333



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

- Continuous Forward Current 100mA
- Peak Forward Current (Pulse Width = 10 μ s, 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