

INFRARED EMITTING DIODES

EVERLIGHT

■ INFRARED EMITTING DIODES MODEL: SIR204/SIR333

■ GENERAL DESCRIPTION

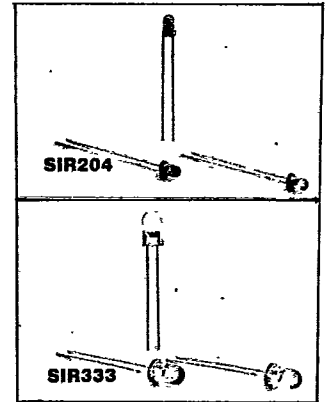
The SIR 204 and SIR 333 are super-high-efficiency Gallium Aluminum Arsenide (GaAlAs) Infrared Emitting Diodes individually encapsulated in blue transparent plastic T-1 or T-1¼ package.

■ 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)

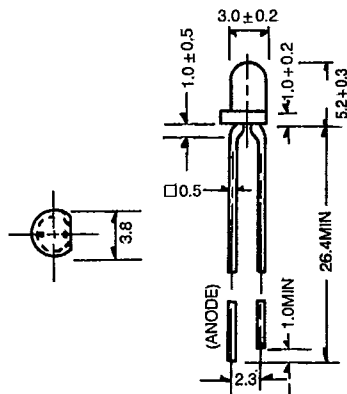
• Continuous Forward Current.....	100mA
• Peak Forward Current (Pulse Width = 10µs, 1% duty cycle).....	1.2A
• Reverse Voltage.....	5V
• Operating Temperature Range.....	- 40°C to + 85°C
• Storage Temperature Range.....	- 40°C to + 85°C
• Lead Soldering Temperature (1/16 inch from body for 5 sec.).....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

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

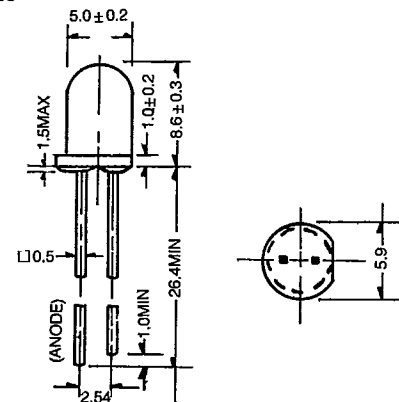
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
V _F	Forward Voltage		1.3	1.7	V	I _F = 100mA
I _R	Reverse Leakage Current			10	µA	V _R = 5.0V
P _o	Radiant Power	21	35		mW	I _F = 100mA
λ _p	Peak Spectral Wavelength		880		nm	I _F = 100mA
Δλ	Spectral Bandwidth Between Half-Power		80		nm	I _F = 100mA
2 θ _½	Viewing Angle to Half Intensity		30		Deg	for SIR204
			26			for SIR333

■ PACKAGE DIMENSIONS

SIR204



SIR333



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.