NTE30132
Infrared Emitting Diode
1.9mm Type SMD Package

Description:

The NTE30132 is an infrared emitting diode in a miniature SMD package which is molded in a water clear plastic with a spherical top view lens. This device is spectrally matched for use with silicon photodiode and phototransistor type devices such as the NTE30133.

Features:

● Small Double−End Package
● High Reliability
● Low Forward Voltage
● Gallium Aluminum Arsenide Chip Material
● Water Clear Lens
● For Use with NTE30133

Applications:

● PCB Mounted Infrared Sensor
● Infrared Emitting for Miniature Light Barrier
● Floppy Disk Drive
● Optoelectronic Switch
● Smoke Detector

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Continuous Forward Current, I_F 65mA
Peak Forward Current (Note 1), I_{FP} 1A
Reverse Voltage, V_R 5V
Power Dissipation (at or below T_A = +25°C), P_D 130mW
Operating Temperature Range, T_{opr} . . . . −40° to +85°C
Storage Temperature Range, T_{stg} . . . . −40° to +85°C
Soldering Temperature (5sec Max), T_{sol} . . . . +260°C

Note 1. Pulse Width ≤ 100μs, Duty Cycle ≤ 1%.

Electro–Optical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Radiant Intensity	E_e	I_F = 20mA	3.0	5.0	–	mW/sr
		I_F = 100mA, Note 1	–	25	–	mW/sr
Peak Wavelength	λ_p	I_F = 20mA	–	940	–	nm
Spectral Bandwidth	$\Delta\lambda$	I_F = 20mA	–	45	–	nm
Forward Voltage	V_F	I_F = 20mA	–	1.2	1.5	V
		I_F = 100mA, Note 1	–	1.4	1.8	V
		I_F = 1A	–	2.6	4.0	V
Reverse Current	I_R	V_R = 5V	–	–	10	µA
View Angle	$2\theta1/2$	I_F = 20mA	–	25	–	deg.

Note 1. Pulse Width ≤ 100µs, Duty Cycle ≤ 1%.