

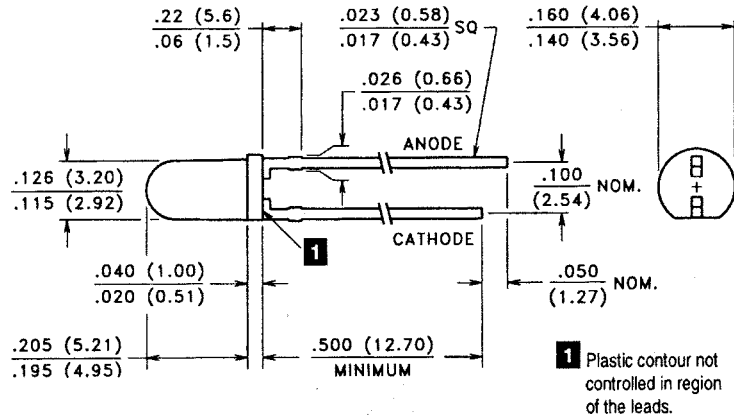
GaAlAs Infrared Emitting Diodes

Long T-1 (3 mm) Plastic Package — 880 nm

VTE3372LAH, 74LAH



PACKAGE DIMENSIONS inch (mm)



DESCRIPTION

CASE 50A Long T-1 (3 mm)
CHIP SIZE: .011" x .011"

This narrow beam angle 3 mm diameter plastic packaged emitter is suitable for use in optical switch applications. It contains a small area, GaAlAs, 880 nm, high efficiency IRED die.

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

| | | | |
|---|----------------|--|------------|
| Maximum Temperatures | | Maximum Reverse Voltage: | 5.0V |
| Storage and Operating: | -40°C to 100°C | Maximum Reverse Current @ $V_R = 5V$: | 10 μA |
| Continuous Power Dissipation: | 100 mW | Peak Wavelength (Typical): | 880 nm |
| Derate above 30°C: | 1.43 mW/°C | Junction Capacitance @ 0V, 1 MHz (Typ.): | 14 pF |
| Maximum Continuous Current: | 50 mA | Response Time @ $I_F = 20$ mA | |
| Derate above 30°C: | 0.71 mA/°C | Rise: 1.0 μs Fall: 1.0 μs | |
| Peak Forward Current, 10 μs , 100 pps: | 2.5 A | Lead Soldering Temperature: | 260°C |
| Temp. Coefficient of Power Output (Typ.): | -8%/°C | (1.6 mm from case, 5 seconds max.) | |

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also GaAlAs curves, pages 108-110)

| Part Number ■ | Output | | | | | | Forward Drop | | Half Power Beam Angle | |
|------------------|--------------------|------|-----------|----------|-------------------|-------------|----------------|------------|-----------------------|----------------|
| | Irradiance | | | | Radiant Intensity | Total Power | Test Current | V_F | | |
| | E_e | | Condition | | I_e | P_O | I_{FT} | @ I_{FT} | $\theta_{1/2}$ | |
| | mW/cm ² | | distance | Diameter | mW/sr | mW | mA (Pulsed) | Volts | | Typ. |
| | Min. | Typ. | mm | mm | Min. | Typ. | | Typ. | Max. | |
| VTE3372LAH | 2.0 | 2.6 | 10.16 | 2.1 | 2.0 | 3.0 | 20 | 1.3 | 1.8 | $\pm 10^\circ$ |
| VTE3374LAH | 4.0 | 5.2 | 10.16 | 2.1 | 4.1 | 5.0 | 20 | 1.3 | 1.8 | $\pm 10^\circ$ |

■ Refer to General Product Notes, page 2.