

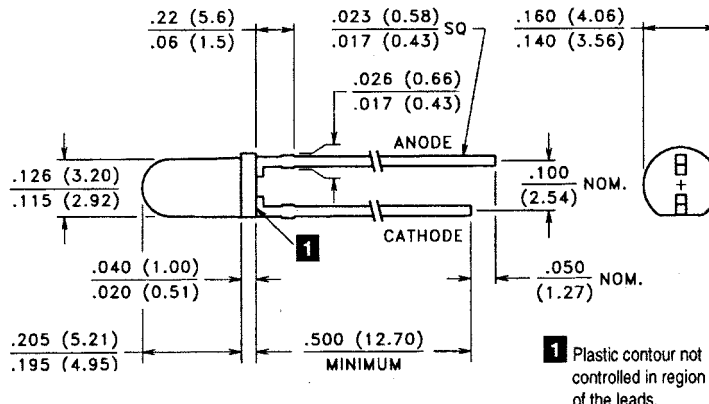
GaAs Infrared Emitting Diodes

Long T-1 Plastic Package — 940 nm

VTE3322LA, 24LA



PACKAGE DIMENSIONS inch (mm)



CASE 50A LONG T-1
CHIP SIZE: .011" X .011"

DESCRIPTION

This narrow beam angle, 3 mm diameter plastic packages, GaAs, 940 nm emitter is suitable for use in optical switch applications.

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

Maximum Temperatures		Maximum Reverse Current @ $V_R = 5V$:	10 μA
Storage and Operating:	-40°C to 100°C	Peak Wavelength (Typical):	940 nm
Continuous Power Dissipation:	100 mW	Junction Capacitance @ 0V, 1 MHz (Typ.):	14 pF
Derate above 30°C:	1.43 mW/°C	Response Time @ $I_F = 20$ mA	
Maximum Continuous Current:	50 mA	Rise: 1.0 μs Fall: 1.0 μs	
Derate above 30°C:	0.71 mA/°C	Lead Soldering Temperature:	260°C
Peak Forward Current, 10 μs , 100 pps:	3 A	(1.6 mm from case, 5 seconds max.)	
Temp. Coefficient of Power Output (Typ.):	-8%/°C		
Maximum Reverse Voltage:	5.0V		

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also GaAlAs curves, pages 123-124)

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						Volts			
	Min.	Typ.	distance	Diameter	mW/sr	mW	mA (Pulsed)	Typ.	Max.	Typ.
VTE3322LA	1.0	1.3	10.16	2.1	1.0	1.5	20	1.25	1.6	$\pm 10^\circ$
VTE3324LA	2.0	2.6	10.16	2.1	2.0	2.5	20	1.25	1.6	$\pm 10^\circ$

■ Refer to General Product Notes, page 2.