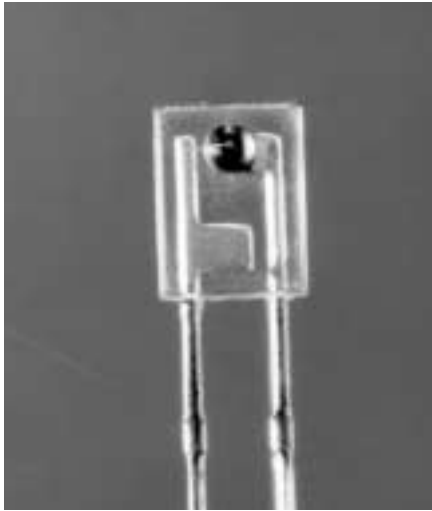


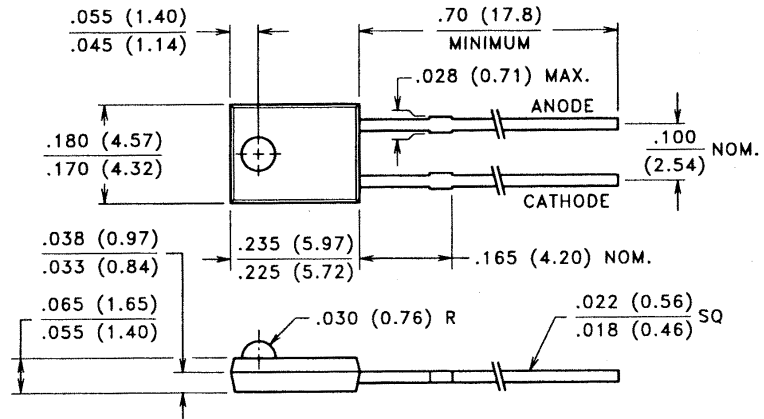
# GaAlAs Infrared Emitting Diodes

Molded Lateral Package — 880 nm

# VTE7172, 7173



## PACKAGE DIMENSIONS inch (mm)



CASE 7 LATERAL  
CHIP SIZE: .011" x .011"

## DESCRIPTION

These side-looking packages are designed for use in PC board mounted interrupt detectors. The package is transfer molded plastic and contains a high efficiency, 880 nm, GaAlAs IRED die.

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

Maximum Temperatures			
Storage and Operating:	-40°C to 85°C	Maximum Reverse Voltage:	5.0V
Continuous Power Dissipation:	100 mW	Maximum Reverse Current @ $V_R = 5V$ :	10 $\mu A$
Derate above 30°C:	1.82 mW/°C	Peak Wavelength (Typical):	880 nm
Maximum Continuous Current:	50 mA	Junction Capacitance @ 0V, 1 MHz (Typ.):	14 pF
Derate above 30°C:	0.91 mA/°C	Response Time @ $I_F = 20$ mA	
Peak Forward Current, 10 $\mu s$ , 100 pps:	2.5 A	Rise: 1.0 $\mu s$ Fall: 1.0 $\mu s$	
Temp. Coefficient of Power Output (Typ.):	-8%/°C	Lead Soldering Temperature:	260°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 <sup>2</sup>		distance	Diameter	mW/sr	mW	mA	Volts		Typ.
	Min.	Typ.	mm	mm	Min.	Typ.	(Pulsed)	Typ.	Max.	
VTE7172	0.4	0.6	16.7	4.6	1.1	2.5	20	1.3	1.8	$\pm 25^\circ$
VTE7173	0.6	0.8	16.7	4.6	1.7	5.0	20	1.3	1.8	$\pm 25^\circ$

■ Refer to General Product Notes, page 2.