



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



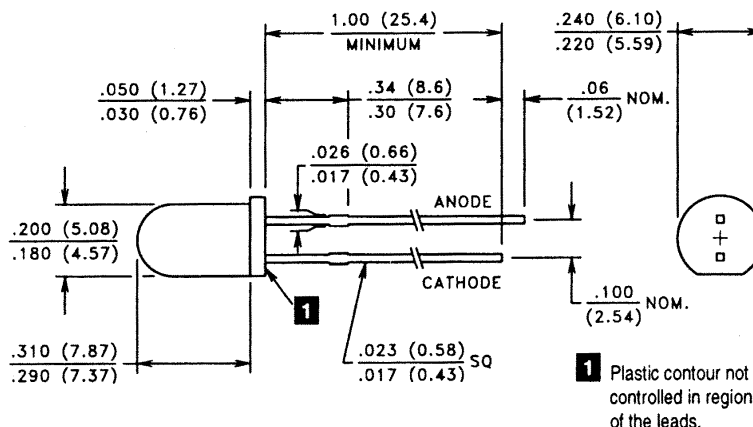
GaAlAs Infrared Emitting Diodes

T-1 $\frac{3}{4}$ (5 mm) Plastic Package — 880 nm

VTE1291-1H, 1291-2H



PACKAGE DIMENSIONS inch (mm)



CASE 26 T-1 $\frac{3}{4}$ (5 mm)
CHIP SIZE: .015" x .015"

DESCRIPTION

This narrow beam angle 5 mm plastic packaged emitter contains a double wirebonded, GaAlAs, 880 nm IRED chip. This cost effective design is well suited for dc or high current pulse applications. This device is a UL recognized component for smoke alarm applications (UL file #S3506).

RoHS Compliant



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 μ A
Continuous Power Dissipation:	200 mW	Peak Wavelength (Typical):	880 nm
Derate above 30°C:	2.86 mW/°C	Junction Capacitance @ 0V, 1 MHz (Typ.):	23 pF
Maximum Continuous Current:	100 mA	Response Time @ I _F = 20 mA	
Derate above 30°C:	1.43 mA/°C	Rise: 1.0 μ s Fall: 1.0 μ s	
Peak Forward Current, 10 μ s, 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	Volts		
	Min.	Typ.	mm	mm	Min.	Typ.	(Pulsed)	Typ.	Max.	
VTE1291-1H	2.5	3.3	36	6.4	32	20	100	1.5	2.0	$\pm 12^\circ$
VTE1291-2H	5.0	6.5	36	6.4	65	25	100	1.5	2.0	$\pm 12^\circ$

■ Refer to General Product Notes, page 2.