



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

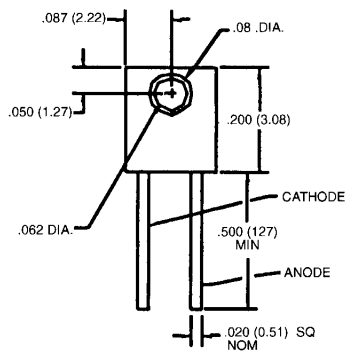
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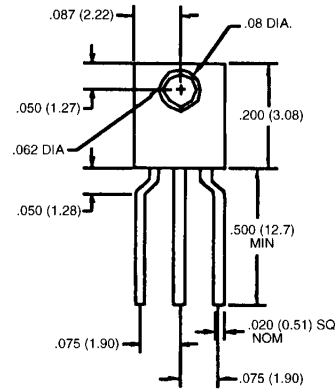


PACKAGE DIMENSIONS



ST1662

INFRARED LED



ST1663

PHOTOSENSOR

- NOTES:
1. DIMENSIONS ARE IN INCHES [mm].
2. TOLERANCE IS $\pm .010$ [.25] UNLESS OTHERWISE SPECIFIED.

DESCRIPTION

The QPE1259 consists of a gallium arsenide LED and an OPTOLOGIC™ silicon photosensor mounted in plastic sidelooker packages.

FEATURE

- Steel lead frames for improved reliability in solder mounting
- Excellent optical-to-mechanical alignment
- Wide emission/reception angle
- Black plastic body allows easy recognition of sensor and filters ambient visible light

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Soldering:	
Lead Temperature (Iron)	240°C for 5 sec. ^(3,4,5)
Lead Temperature (Flow)	260°C for 10 sec. ^(3,4)
INPUT DIODE	
Continuous Forward Current	60 mA
Reverse Voltage	6.0 Volts
Power Dissipation	100 mW ⁽¹⁾
OUTPUT OPTOLOGIC™	
Output Current	50 mA
Operation Voltage Allowed Range	4.5 to 16 Volts
Output Voltage Allowed Range	2.4 to 30 Volts
Power Dissipation	200 mW ⁽²⁾

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
INPUT DIODE						
Forward Voltage	V_F	—	1.5	—	V	$I_F = 20\text{ mA}$
Reverse Leakage Current	I_R	—	10	—	μA	$V_R = 3\text{ V}$
OUTPUT OPTOLOGIC™						
Operating Supply Voltage	V_{CC}	4.5	—	16.0	V	
Supply Current	I_{CC}	—	12.0	—	mA	$E_s = 0$ or 0.3 mW/cm^2
Output Current High	I_{OH}	—	100	—	μA	$E_s = 0, V_{OH} = 30\text{ V}$
Low Level Output Voltage	V_{OL}	—	0.4	—	V	$E_s = .3\text{ mW/cm}^2, R_L = 270\Omega$
COUPLED						
Turn-On Threshold Current	$I_{F(+)}$	—	20.0	—	mA	$V_{CC} = 5\text{ V}, R_L = 270\Omega, D = .155^{(6)}$
Turn-Off Threshold Current	$I_{F(-)}$	1.0	—	—	mA	$V_{CC} = 5\text{ V}, R_L = 270\Omega, D = .155^{(6)}$
Hysteresis Ratio	$I_{F(+)} / I_{F(-)}$	1.1	—	2.0	—	$V_{CC} = 5\text{ V}, R_L = 270\Omega, D = .155^{(6)}$

NOTES
1. Derate power dissipation linearly 1.67 mW/°C above 25°C.
2. Derate power dissipation linearly 3.33 mW/°C above 25°C.
3. RMA flux is recommended.
4. Methanol or Isopropyl alcohols are recommended as cleaning agents.
5. Soldering iron tip 1/16" (1.6 mm) from housing.
6. D is the distance from lens tip to lens tip.



PLASTIC SIDELOOKER PAIR

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