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!

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LITEON®
OPTOELECTRONICS

IR Emitter and Detector

Product Data Sheet

LTR-5576D

Spec No.: DS-50-92-0125

Effective Date: 06/10/2010

Revision: J

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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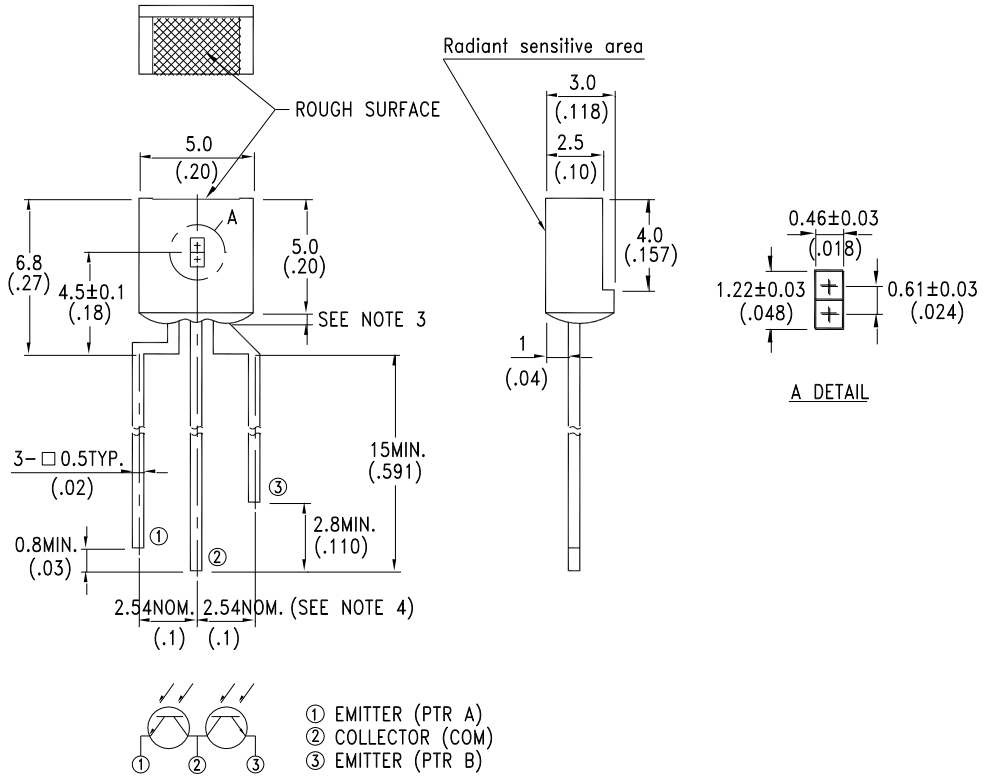
FEATURES

* WIDE RANGE OF COLLECTOR CURRENT
* HIGH SENSITIVITY
* FAST SWITCHING TIME
* THE LTR-5576D IS A SPECIAL DARK GREEN PLASTIC PACKAGE THAT CUT THE VISIBLE LIGHT FOR THE DETECTORS OF INFRARED APPLICATIONS

PACKAGE DIMENSIONS



NOTES:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.15mm(.006") unless otherwise noted.
3. Protruded resin under flange is 1.5mm(.059") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

ABSOLUTE MAXIMUM RATINGS AT TA=25℃

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	100	mW
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Operating Temperature Range	-40℃ to + 85℃	
Storage Temperature Range	-55℃ to + 100℃	
Lead Soldering Temperature [1.6mm(.063") From Body]	260℃ for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT T_A=25℃

PARAMETER	SYMBOL	MIN.	TYP.	MAX	UNIT	TEST CONDITION	BIN No.	Color Marking
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	Ic = 1mA Ee = 0mW/cm²		
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	IE = 100 μA Ee = 0mW/cm²		
Collector Emitter Saturation Voltage	$V_{CE(SAT)}$		0.1	0.4	V	Ic = 50 μA Ee = 0.5mW/cm²		
Rise Time	Tr		15		μs	Vcc = 5V Ic = 1mA R_L = 1KΩ		
Fall Time	Tf		18		μs			
Collector Dark Current	I_{CEO}		0.1	100	nA	V_{CE} = 10V Ee = 0mW/cm²		
On Stage Collector Current Ratio (I_{L1}/I_{L2})	R	0.8	1.0	1.25				
Average On State Collector Current Range Setting of LITE-ON Production (I_{L1}/I_{L2}) / 2	$I_{C(ON)}$	200		300	μA	V_{CE} = 5V Ee = 1mW/cm²	BIN A	Red
		300		400			BIN B	Black
		400		500			BIN C	Green
		500		600			BIN D	Blue
		600		700			BIN E	White
		700		800			BIN F	Purple
Average On State Collector Current Range Q.C Limits (I_{L1}/I_{L2}) / 2	$I_{C(ON)}$	160		360	μA	V_{CE} = 5V Ee = 1mW/cm²	BIN A	Red
		240		480			BIN B	Black
		320		600			BIN C	Green
		400		720			BIN D	Blue
		480		840			BIN E	White
		560		960			BIN F	Purple

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25℃ Ambient Temperature Unless Otherwise Noted)

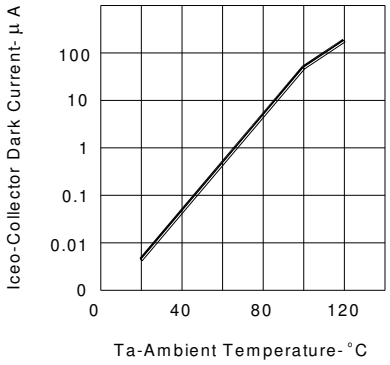


FIG.1 COLLECTOR DARK CURRENT VS AMBIENT TEMPERATURE

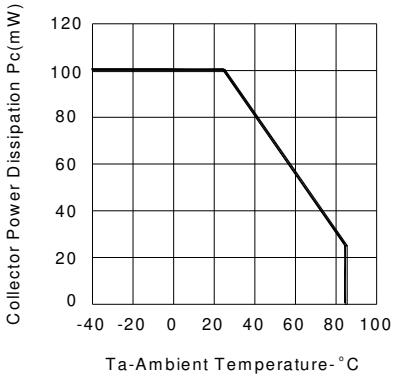


FIG.2 COLLECTOR POWER DISSIPATION VS AMBIENT TEMPERATURE

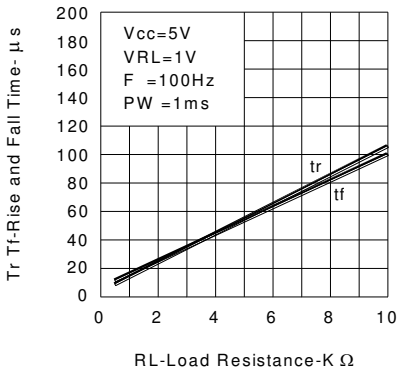


FIG.3 RISE AND FALL TIME VS LOAD RESISTANCE

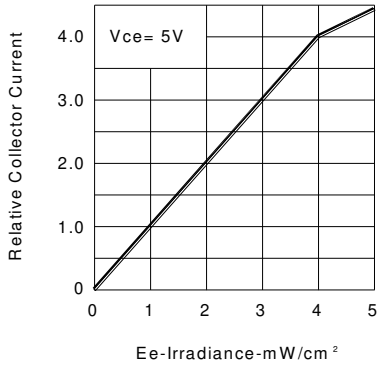


FIG.4 RELATIVE COLLECTOR CURRENT VS IRRADIANCE