



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





Photointerrupter Product Data Sheet

LTH-1650-01

Spec No.: DS-55-95-0009

Effective Date: 01/06/2001

Revision: B

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

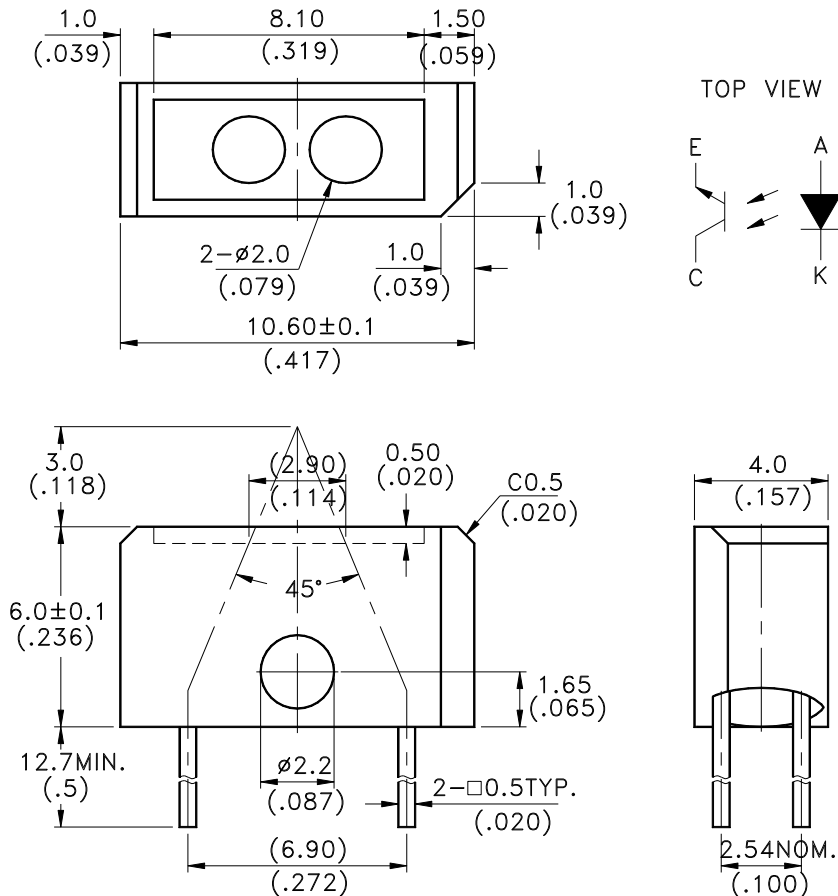
FEATURES

- * FOCAL DISTANCE: 3 mm.
- * INFRARED RAY CUT-OFF TYPE.

APPLICATION

- * PRINTER
- * FAX
- * OPTOELECTRONIC SWITCHES

PACKAGE DIMENSIONS



NOTES:

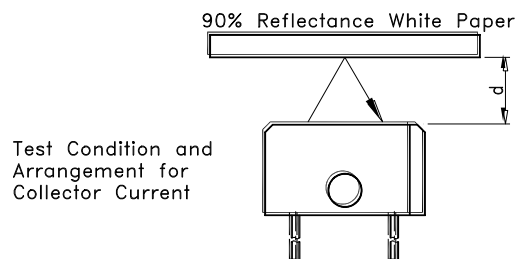
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm(.010") unless otherwise noted.

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
INPUT LED			
Power Dissipation	P _D	75	mW
Peak Forward Current (300 pps , 10 μ S pulse)	I _{CP}	1	A
Continuous Forward Current	I _F	60	mA
Reverse Voltage	V _R	5	V
OUTPUT PHOTOTRANSISTOR			
Power Dissipation	P _C	100	mW
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Collector Voltage	V _{ECO}	5	V
Collector Current	I _C	20	mA
Operating Temperature Range	T _{opr}	-25°C to + 85°C	
Storage Temperature Range	T _{stg}	-40°C to + 100°C	
Lead Soldering Temperature [1.6mm (.063") Form Case]	T _S	260°C for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT $T_A=25^\circ\text{C}$

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
INPUT LED						
Forward Voltage	V_F		1.2	1.6	V	$I_F = 20\text{mA}$
Reverse Current	I_R			100	μA	$V_R=5\text{V}$
OUTPUT PHOTOTRANSISTOR						
Collector-Emitter Dark Current	I_{CEO}			100	nA	$V_{CE}=10\text{V}$
COUPLER						
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$			0.4	V	$I_C=0.05\text{mA}$ $I_F=20\text{mA}$
On State Collector Current	$I_{C(ON)}$	100		300	μA	$V_{CE}=5\text{V}$ BIN A
		260		650		BIN B
		400		1200		BIN C
Response Time	Rise Time	T_R		3	μS	$V_{CE}=5\text{V}, I_C=2\text{mA}$ $R_L=100\ \Omega$
	Fall Time	T_F		4		



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

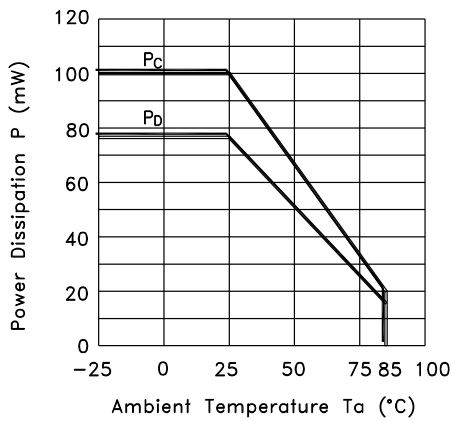


Fig.2 Forward Current vs. Forward Voltage

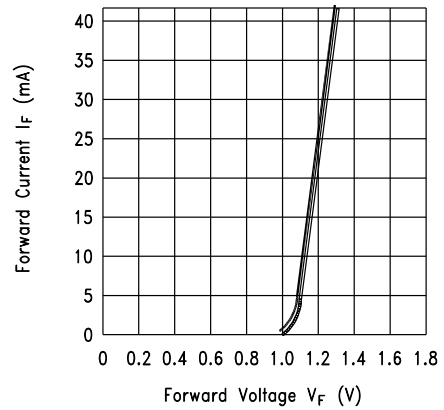


Fig.3 Collector Current vs. Collector-emitter Voltage

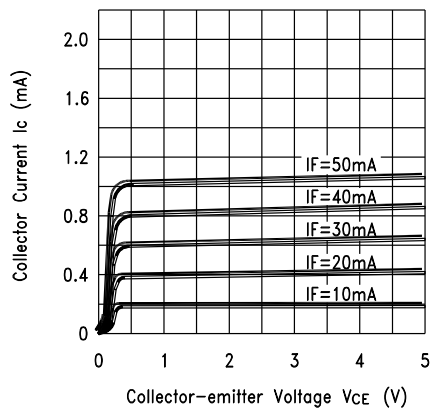
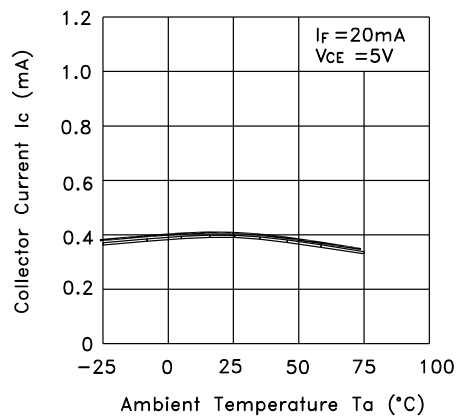


Fig.4 Collector Current vs. Ambient Temperature



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector-emitter Saturation vs. Voltage Ambient Temperature

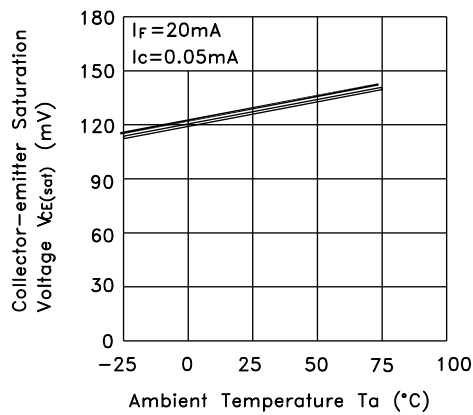


Fig.7 Response Time vs. Load Resistance

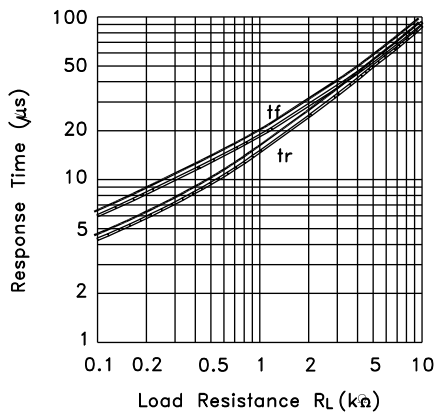
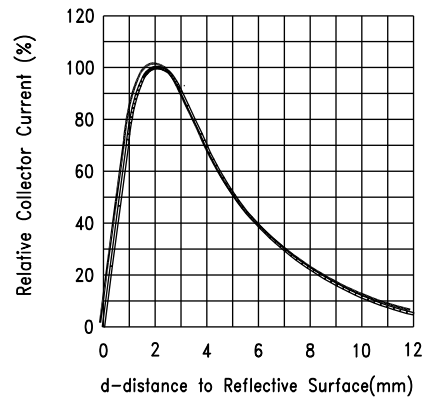


Fig.6 Relative Collector Current vs. Object Distance



Test Circuit for Response Time

