



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-1550-06

Spec No.: DS-55-99-0008

Effective Date: 06/15/2000

Revision: C

LITE-ON DCC

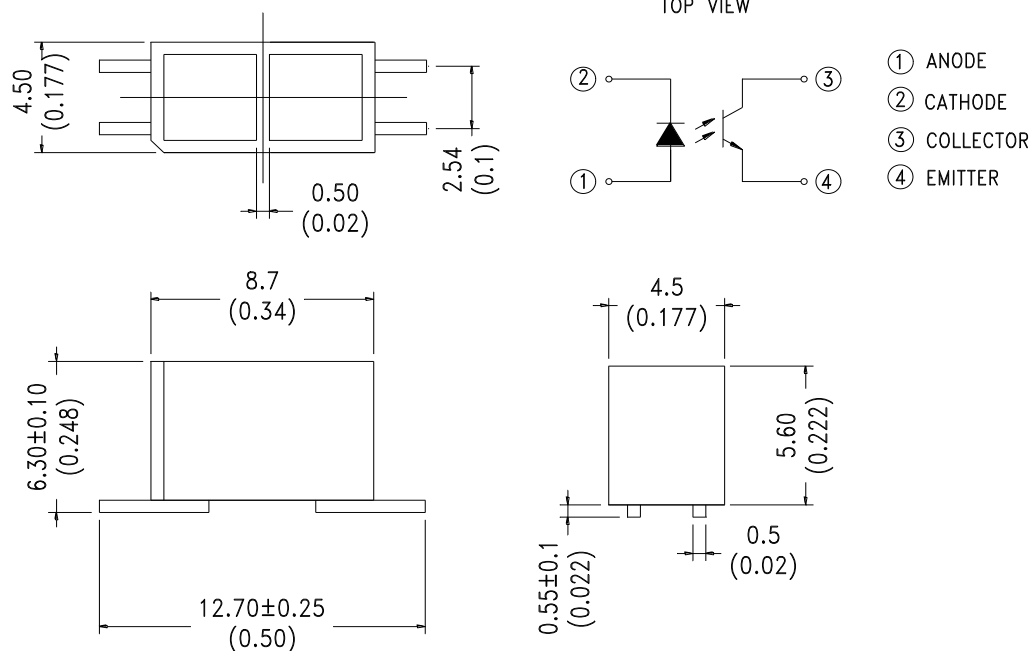
RELEASE

BNS-OD-FC001/A4

FEATURES

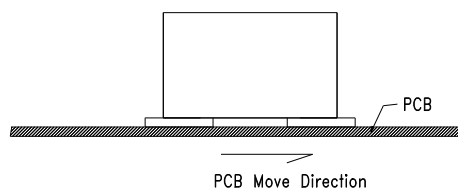
- * NON-CONTACT SWITCHING.
- * FAST SWITCHING SPEED.

PACKAGE DIMENSIONS

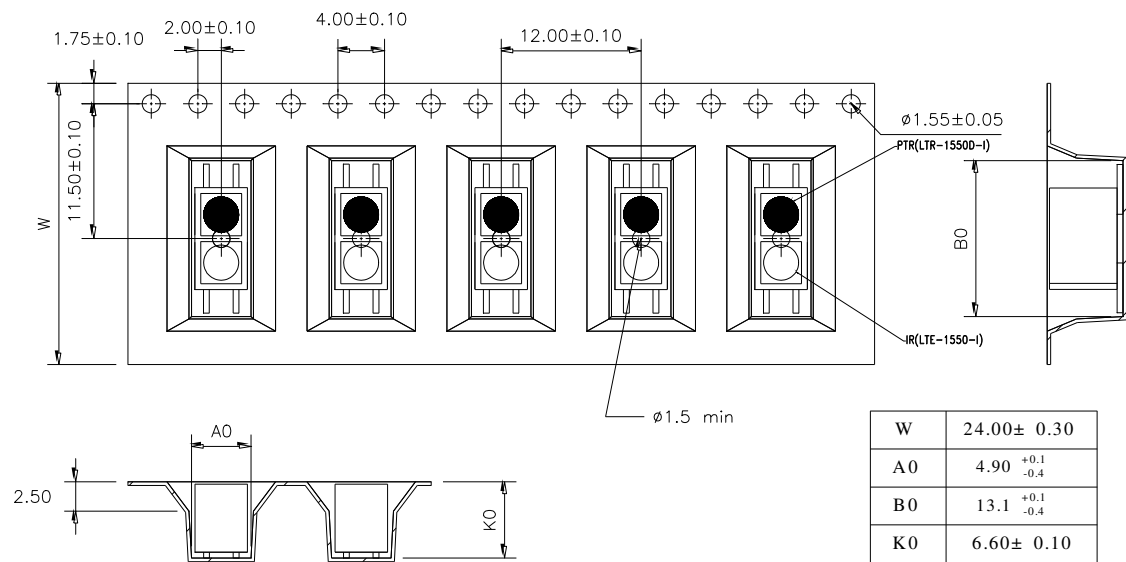


NOTES:

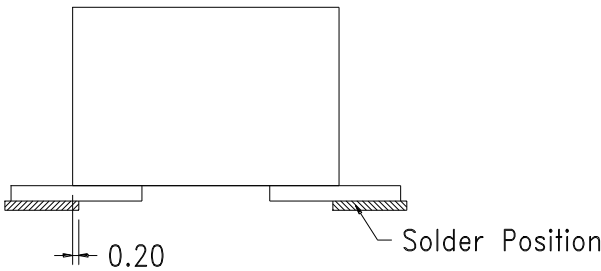
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}(.010")$ unless otherwise noted.
3. Applicable to reflow soldering :
 - Preheat : 160°C within 120 seconds
 - Reflow : 220°C within 20 seconds
 - (Peak : 220°C)
4. Device put on PCB position for reflow as follow :



TAPING DIMENSIONS



SOLDERING AREA :



ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
INPUT DIODE			
Power Dissipation	P _D	90	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°C

PARAMETER		SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
INPUT DIODE							
Forward Voltage		V _F		1.2	1.6	V	I _F = 20mA
Reverse Current		I _R			100	μA	V _R =5V
OUTPUT PHOTOTRANSISTOR							
Collector-Emitter Dark Current		I _{CEO}			100	nA	V _{CE} =10V
COUPLER							
Collector-Emitter Saturation Voltage		V _{CE(SAT)}			0.4	V	I _C =0.5mA I _F =20mA
On State Collector Current	I _{C(ON)}	BIN A	750		1150	μA	V _{CE} =5V I _F =20mA D=3.5 mm (90% Reflective White Paper)
		BIN B	1090		1430		
		BIN C	1370		1770		
Response Time	Rise Time	T _R		3	15	μS	V _{CE} =5V, I _C =2mA R _L =100 Ω
	Fall Time	T _F		4	20		

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

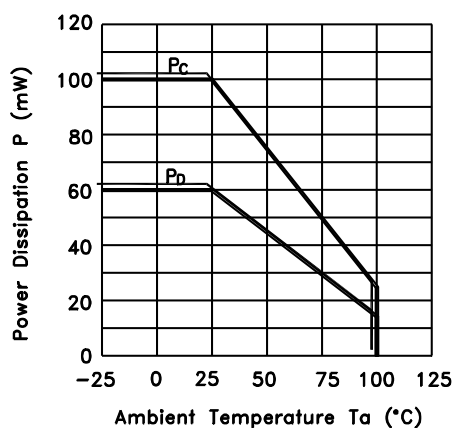


Fig.2 Forward Current I_f vs. Forward Voltage

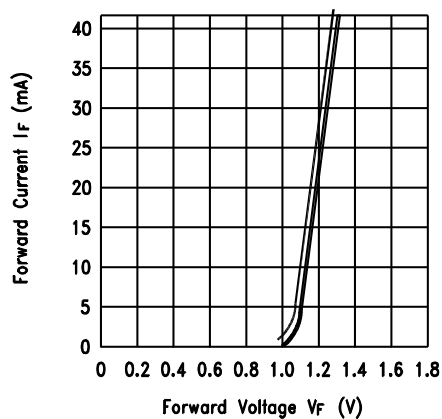


Fig.3 Collector Current vs. Forward Voltage

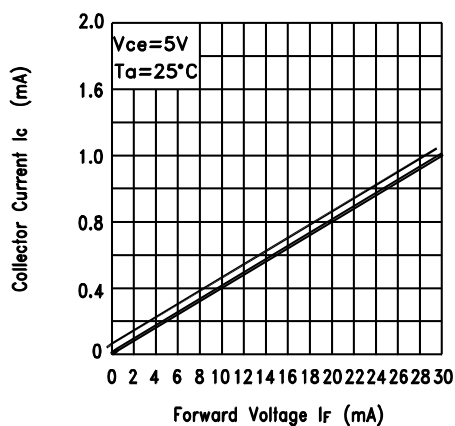
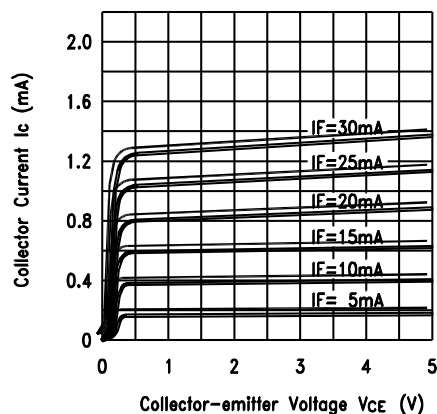


Fig.4 Collector Current vs. Collector-emitter Voltage



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs.
Ambient Temperature

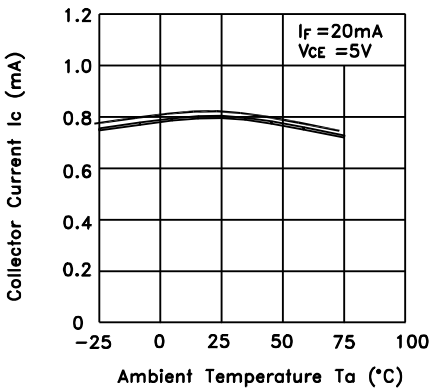


Fig.6 Collector-emitter Saturation
Voltage vs. Ambient Temperature

