



Photointerrupter

Product Data Sheet

LTH-306-09S

Spec No.: DS-55-99-0011

Effective Date: 05/23/2000

Revision: -

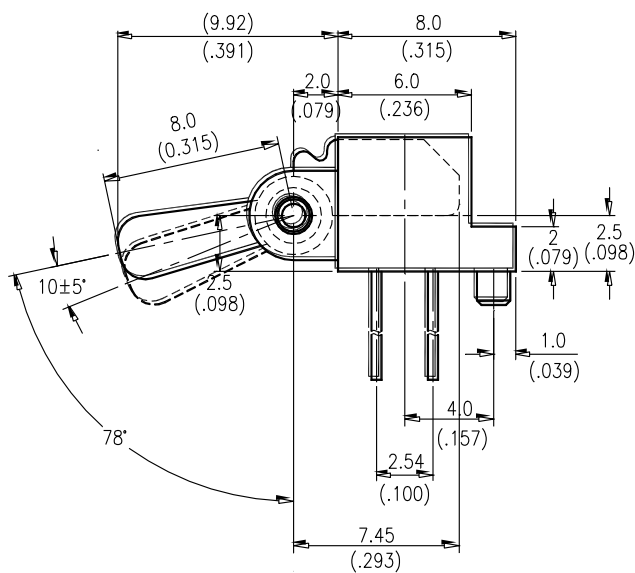
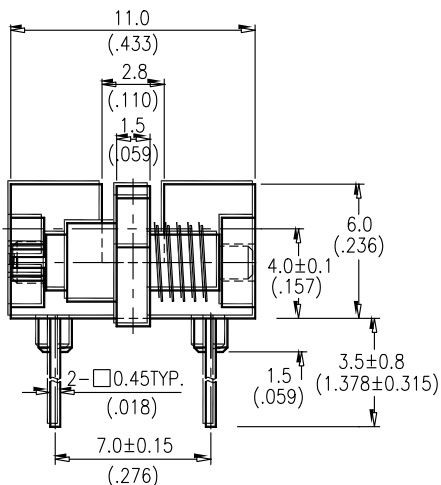
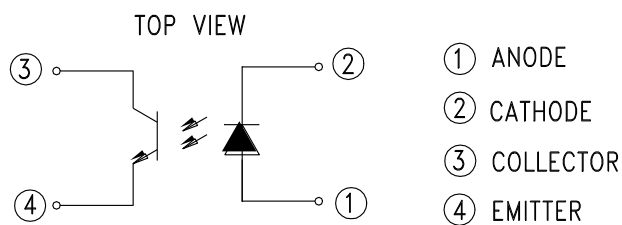
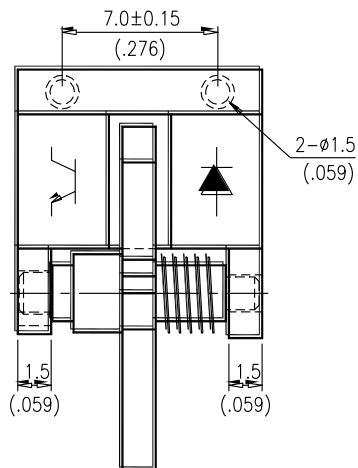
LITE-ON DCC

RELEASE

FEATURES

- * MECHANICAL SWITCH REPLACEMENT.
- * CUSTOMIZED LEVER ARM CAN BE DESIGNED FOR SPECIFIC APPLICATION.

PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}(.010")$ unless otherwise noted.

ABSOLUTE MAXIMUM RATINGS AT T_A=25°C

PARAMETER	MAXIMUM RATING	UNIT
INPUT LED		
Power Dissipation	75	mW
Peak Forward Current (300 pps , 10 μ S pulse)	1	A
Continuous Forward Current	50	mA
Reverse Voltage	5	V
OUTPUT PHOTOTRANSISTOR		
Power Dissipation	100	mW
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Collector Current	20	mA
Operating Temperature Range	-25°C to + 85°C	
Storage Temperature Range	-40°C to + 100°C	
Lead Soldering Temperature [1.6mm (.063") Form Case]	260°C for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25℃

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
INPUT LED						
Forward Voltage	V _F		1.2	1.6	V	I _F = 20mA
Reverse Current	I _R			100	μ A	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 =0.25mA I _F =20mA
On State Collector Current	I _{C(ON)}	0.5			mA	V _{CE} =5V I _F =20mA
Action Angle		8		14	DEG	V _{CE} =5V I _F =20mA

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

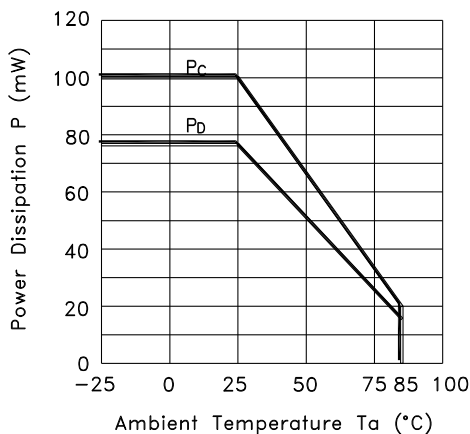


Fig.2 Forward Current vs. Forward Voltage

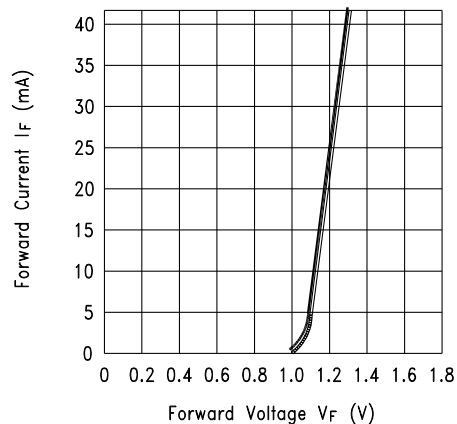


Fig.3 Collector Current vs. Forward Voltage

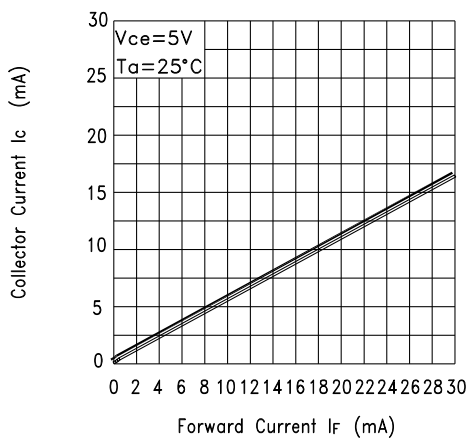
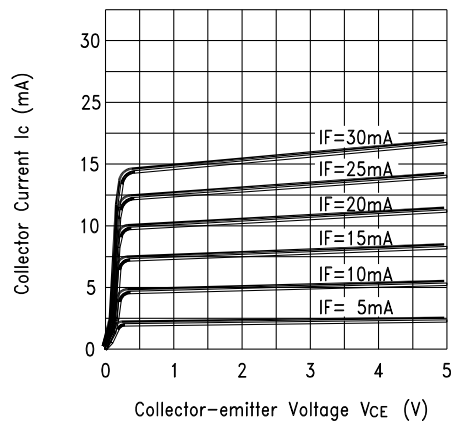


Fig.4 Collector Current vs. Collector-emitter Voltage



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs.
Ambient Temperature

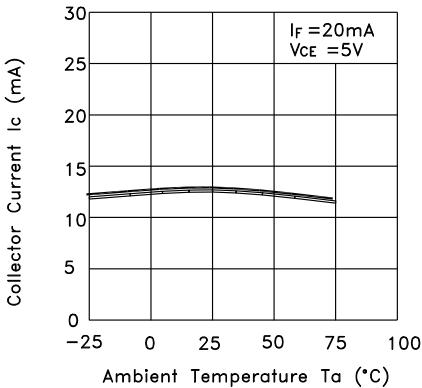


Fig.6 Collector-emitter Saturation
Voltage vs. Ambient Temperature

