

LSOP4, DC Input, Photo Transistor Coupler

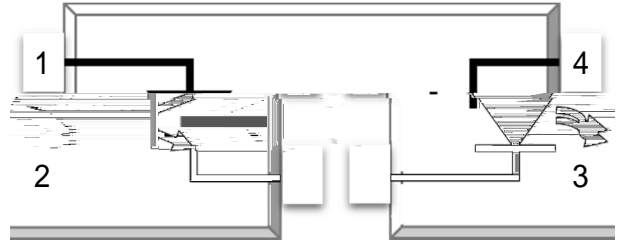
Description

Features

Applications

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-
-
-

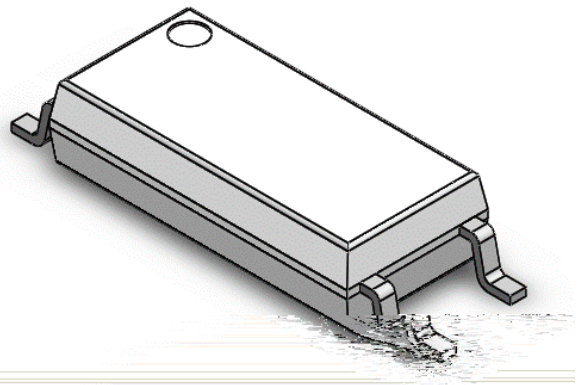
SCHEMATIC



PIN DEFINITION

- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

PACKAGE OUTLINE





LSOP4, DC Input, Photo Transistor Coupler

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Note 1. 100µs pulse, 100 ! "#e\$uenc%
Note 2. A& ' o# 1 ()nute, R. . * +0 , -0.



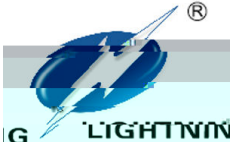
LSOP4, DC Input, Photo Transistor Coupler

ELECTRICAL CHARACTERISTICS at Ta = 25°C

Symbol	Parameter	Min.	Max.	Unit
I _F	Forward Current	I _{F1}	20	mA
		I _{F2}	20	mA
I _{CE}	Collector Current	I _{CE1}	20	mA
		I _{CE2}	20	mA
V _{CE}	Collector-Emitter Voltage	V _{CE1}	5	V
		V _{CE2}	5	V
I _C	Collector Current	I _{C1}	20	mA
		I _{C2}	20	mA
I _{LED}	LED Current	I _{LED1}	20	mA
		I _{LED2}	20	mA
V _{LED}	LED Voltage	V _{LED1}	1.2	V
		V _{LED2}	1.2	V
I _{LED}	LED Current	I _{LED3}	20	mA
		I _{LED4}	20	mA
V _{LED}	LED Voltage	V _{LED3}	1.2	V
		V _{LED4}	1.2	V
I _{LED}	LED Current	I _{LED5}	20	mA
		I _{LED6}	20	mA
V _{LED}	LED Voltage	V _{LED5}	1.2	V
		V _{LED6}	1.2	V
I _{LED}	LED Current	I _{LED7}	20	mA
		I _{LED8}	20	mA
V _{LED}	LED Voltage	V _{LED7}	1.2	V
		V _{LED8}	1.2	V
I _{LED}	LED Current	I _{LED9}	20	mA
		I _{LED10}	20	mA
V _{LED}	LED Voltage	V _{LED9}	1.2	V
		V _{LED10}	1.2	V
I _{LED}	LED Current	I _{LED11}	20	mA
		I _{LED12}	20	mA
V _{LED}	LED Voltage	V _{LED11}	1.2	V
		V _{LED12}	1.2	V
I _{LED}	LED Current	I _{LED13}	20	mA
		I _{LED14}	20	mA
V _{LED}	LED Voltage	V _{LED13}	1.2	V
		V _{LED14}	1.2	V

Note 1. I_F = 20mA /
 Note 2. I_C = 20mA





CHARACTERISTIC CURVES

Fig. 1 Forward Current vs. Ambient Temperature	Fig. 2 Collector Power Dissipation vs. Ambient Temperature
Fig. 3 Forward Current vs. Forward Voltage	Fig. 4 Collector Dark Current vs. Ambient Temperature

Fig. 1 Forward Current
vs. Collector-Emitter Voltage

Fig. 4 Collector Dark Current
vs. Collector-Emitter Voltage



CHARACTERISTICS

Fig. 5 Normalized Current Transfer Ratio vs. Forward Current

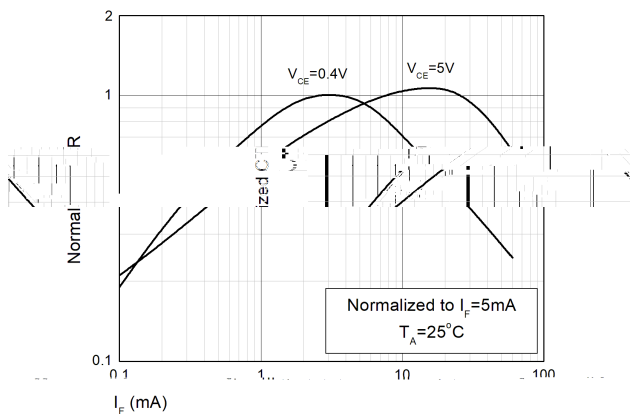


Fig. 8 Normalized Current Transfer Ratio vs. Ambient Temperature

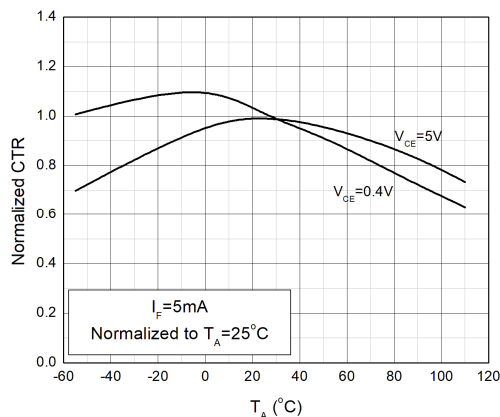


Fig. 9 Collector-Emitter Saturation Voltage vs. Ambient Temperature

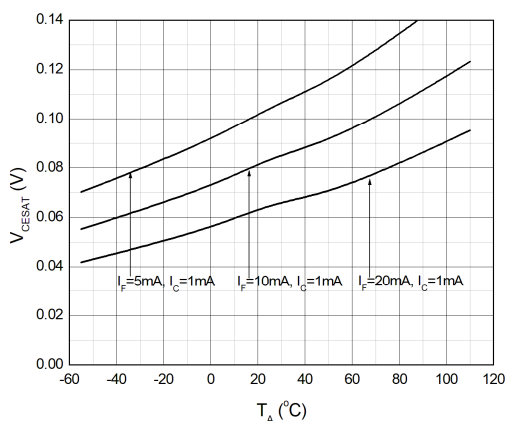


Fig. 10 Switching Time vs. Load Resistance

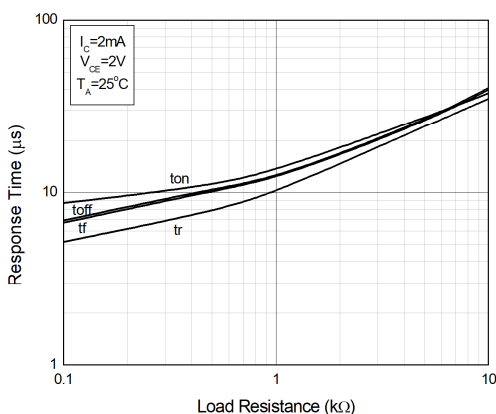
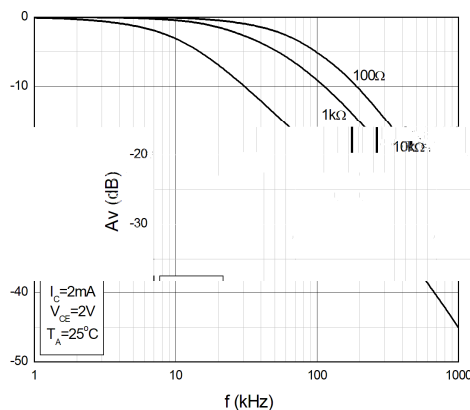
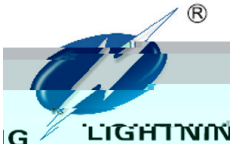


Fig. 11 Frequency Response





TEST CIRCUITS

Fig. 12 Test Circuit of Rise Time

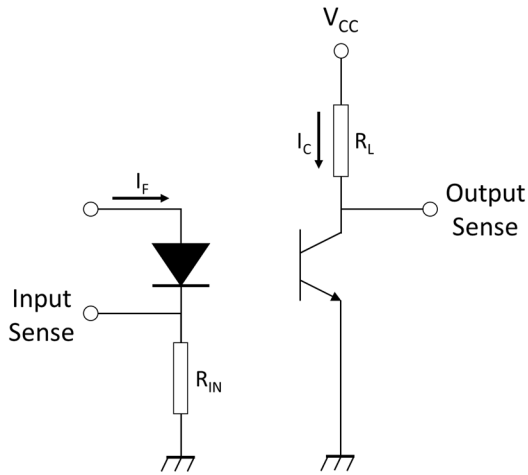


Fig. 13 Characteristic of Rise Time

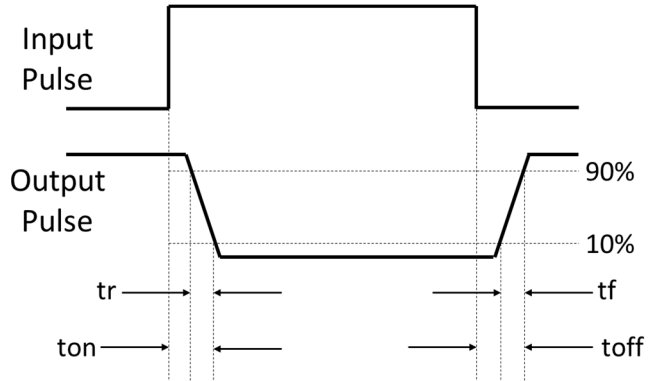
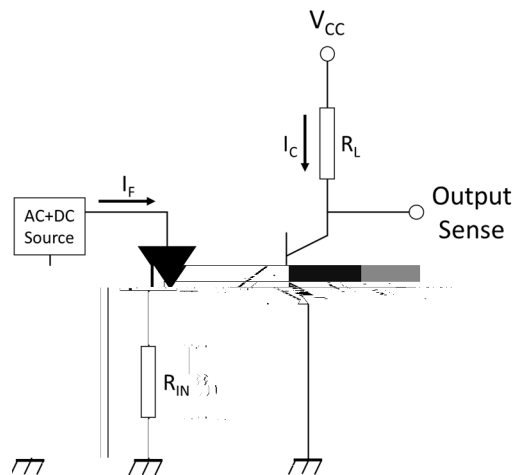
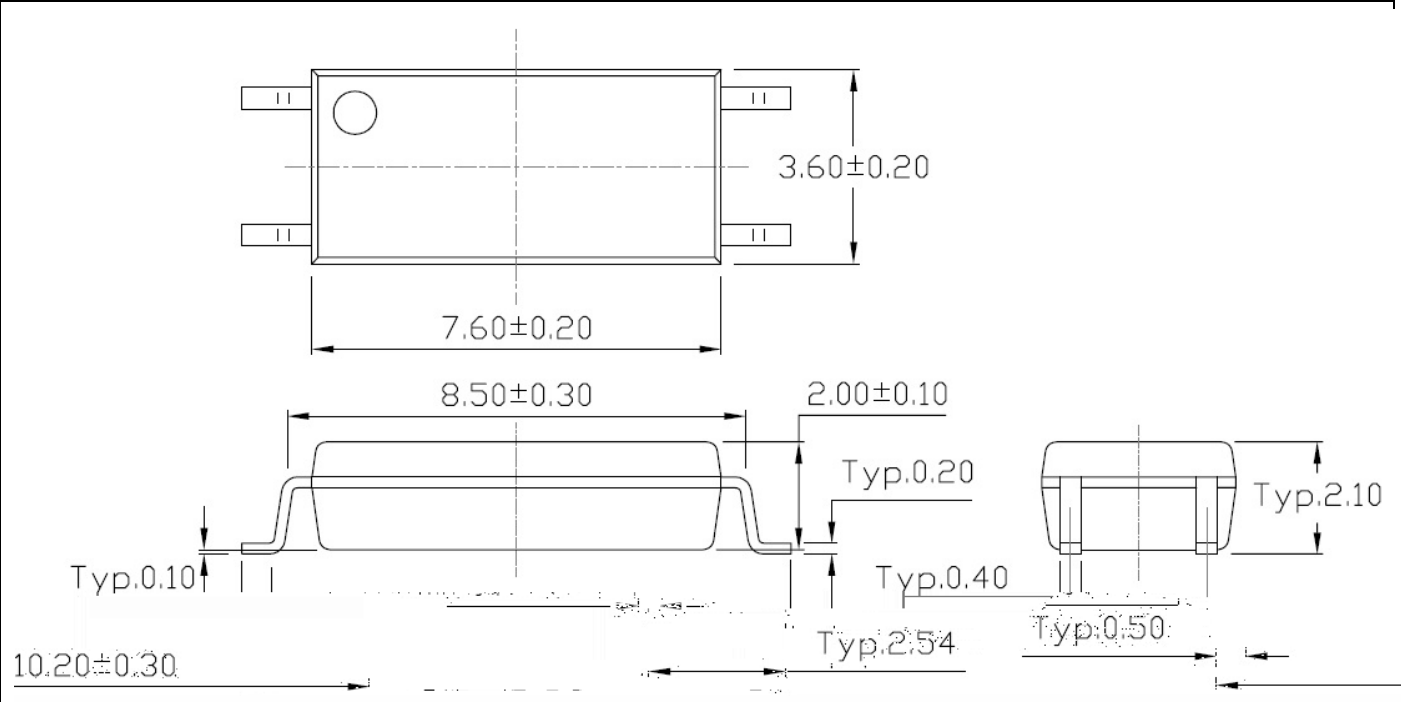


Fig. 14 Test Circuit of Frequency

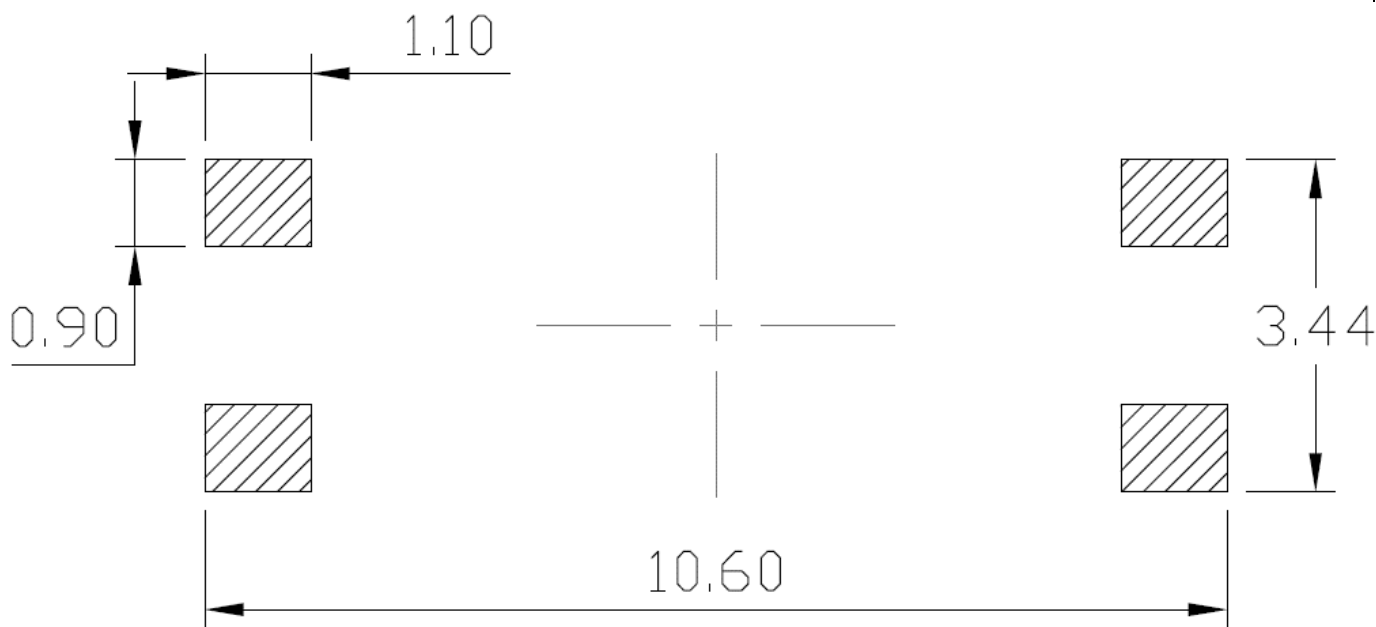


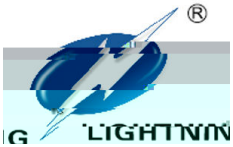


PAC A ! E DIMENSIONS (Dimension\$ in mm & nle\$\$ other / i\$e \$tated=



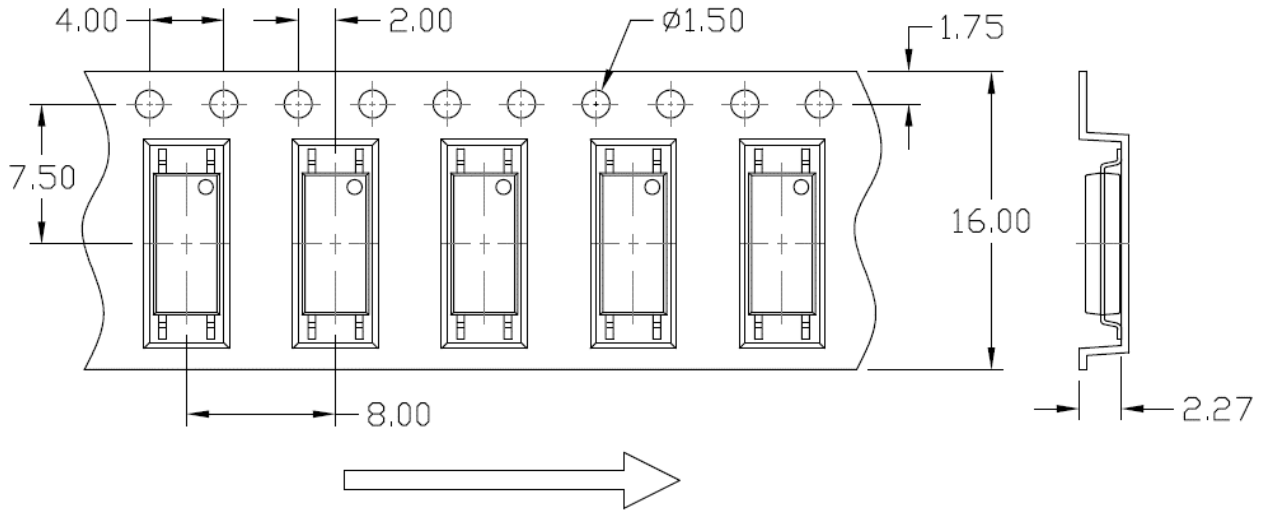
) ECOMMENDED SO#DE) MAS (Dimension\$ in mm & nle\$\$ other / i\$e \$tated=



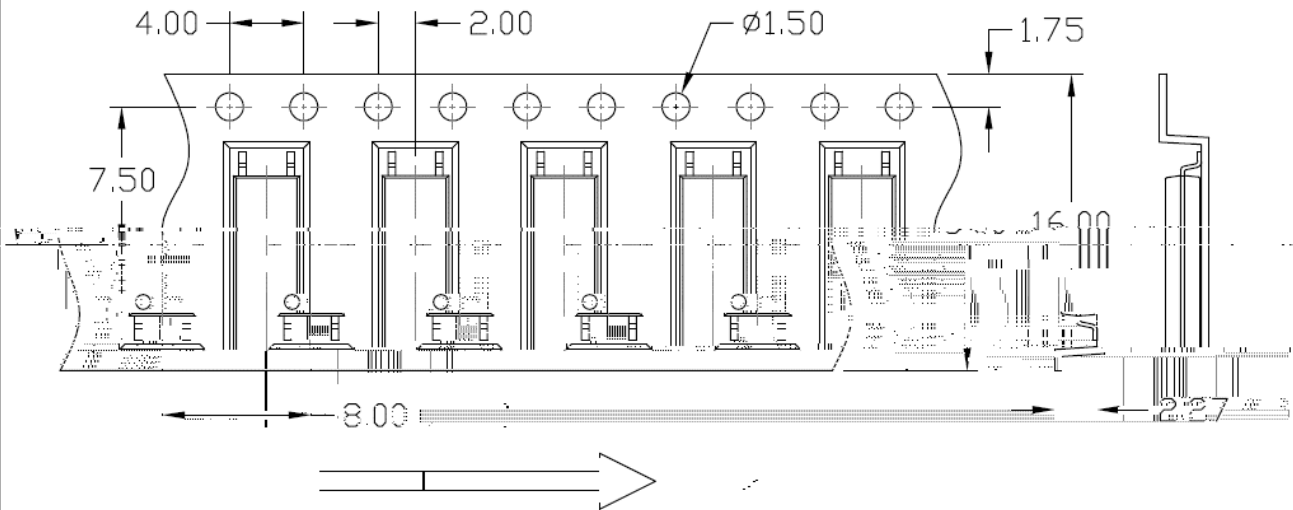


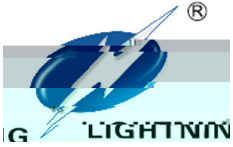
CA)) IE) TAPE SPECIFICATIONS (Dimension\$ in mm &nle\$\$ other / i\$e \$tated=

O%tion T1



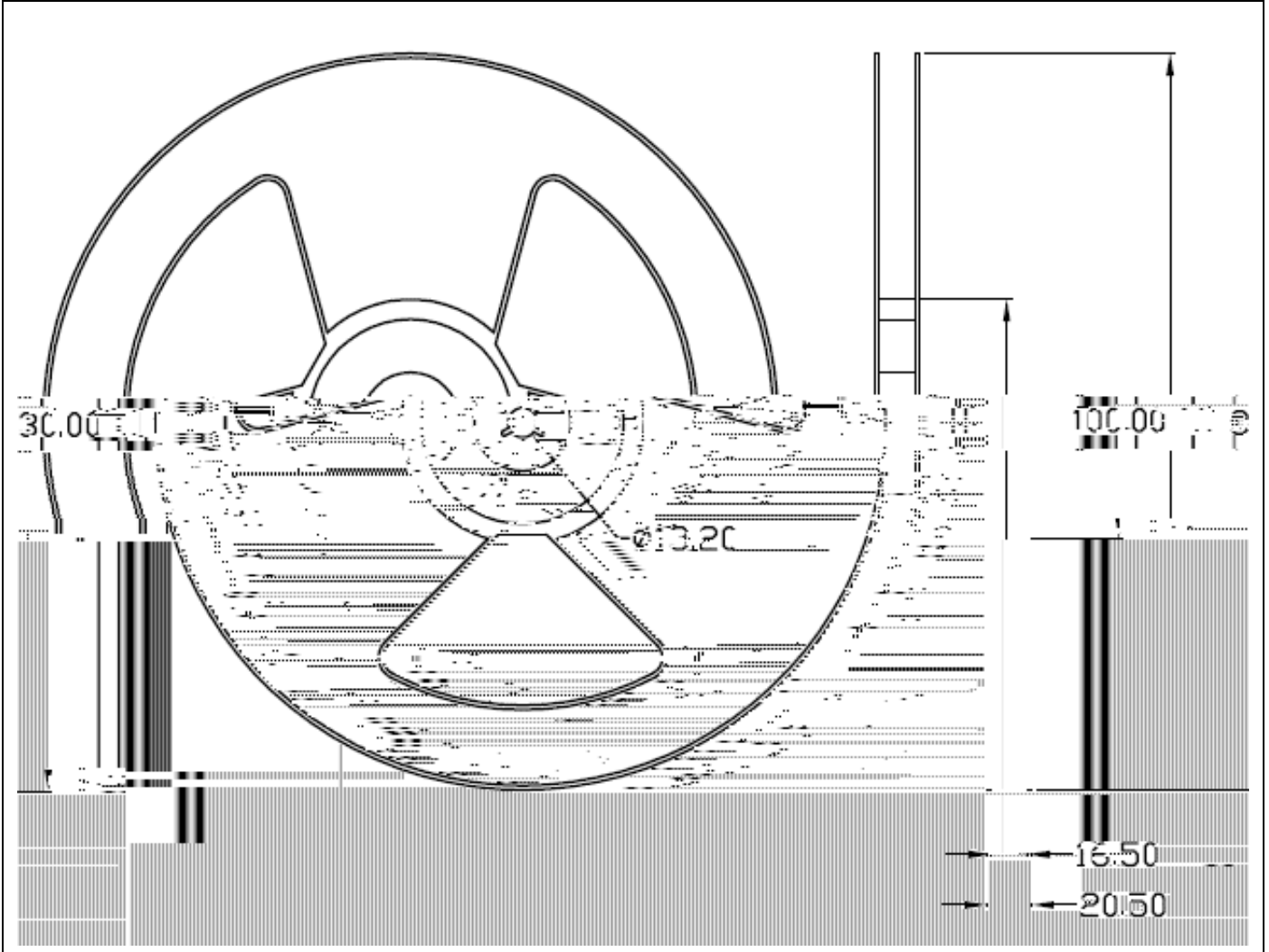
O%tion T2





MECHANICAL SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T1 > T2





www.tdled.com

TD101X Series

LSOP4, DC Input, Photo Transistor Coupler

MECHANICAL SPECIFICATIONS (mm)

Inner diameter

2.3W ± 0.1mm 3.0mm ± 0.1mm 3.0mm ± 0.1mm

Outer diameter



ORDERING AND MARKING INFORMATION

MARKING INFORMATION



TD @ Company
1:1 (@ Part Number
- @ - Designation
A @ Fiscal Year
A @ Manufacturing Code
B B @ Board Bee

ORDERING INFORMATION

PACKAGE INFORMATION

TD1:1 (CD=3! -

福建天电光电有限公司
FUJIAN LIGHTNING OPTOELECTRONIC CO., LTD.

Part No : XXXXXXXXXXXX Bin Code : X

Lot No : XXXXXXXXXXXX

Date Code : XXXX

Q'ty : XXXX pcs

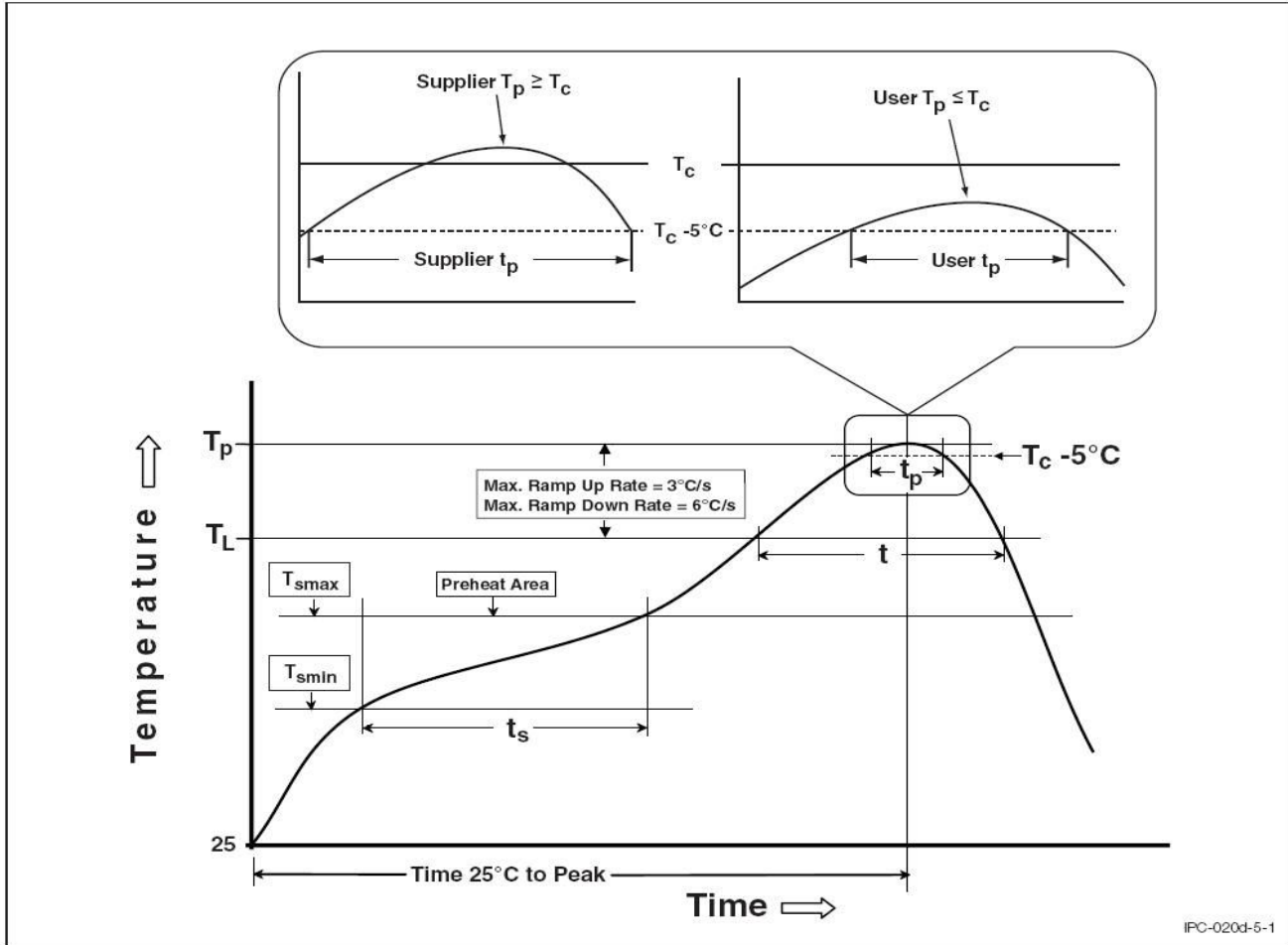
PACKAGE ANTIFAKE

Option	E&antit<	E&antit< F Inner 1o?	E&antit< F O&ter 1o?



)EF#OB INFO)MATION

)EF#OB P)OFI#E



Profile Feature	Sn3P1 A Sem1 Profile	P13Free A Sem1 Profile



DISC#AIME)