



LIGITEK

LIGITEK ELECTRONICS CO.,LTD.
Property of Ligitek Only

TAPE AND REEL TYPE LED LAMPS

LPT3323/TRS-1

DATA SHEET

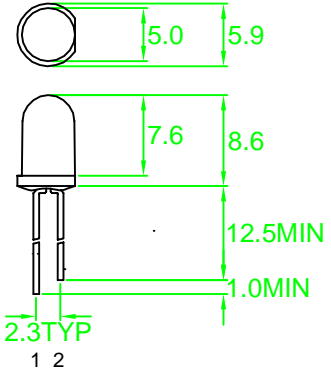
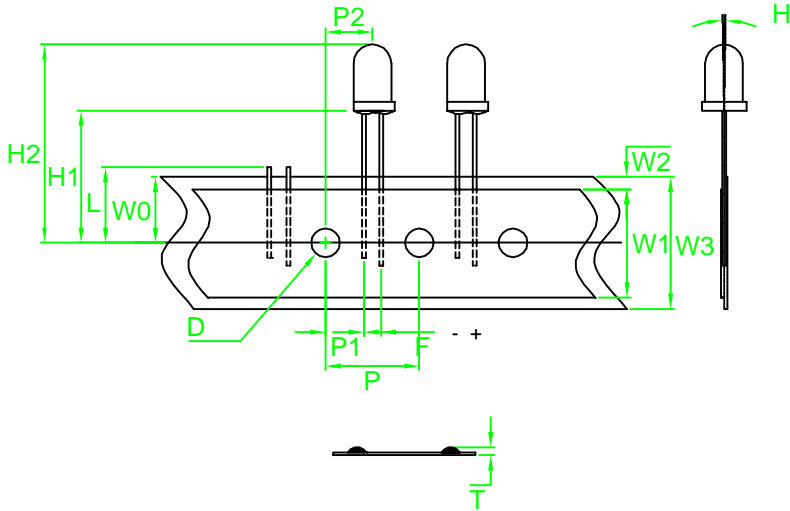
DOC. NO : QW0905-LPT3323/TRS-1

REV. : A

DATE : 29 - Apr. - 2006



Package Dimension



1.EMITTER
2.COLLECTOR

- Features
- . High illumination sensitivity
 - . Stable characteristics
 - . Spectrally and mechanically matched with IR emitter
- Description

The LPT3323/TRS-1 series are silicon nitride passivated NPN planar phototransistors with exceptionally table characteristics and igh illumination sensitivity the cases of LPT3323/TBS-1 are ncapsulated in water clear plastic T1 3/4 package individualt

Note:1.All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$ unless otherwise noted
2.Specifications are subject to change without notice

MAXIMUM RATINGS($T_a=25$)

PARAMETER	MAXIMUM RATINGS	UNIT
Power Dissipation	100	mw
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Operating Temperature	-50 TO +100	
Storage Temperature	-50 TO +100	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 seconds	

ELECTRICAL CHARACTERISTICS($T_a=25$)

PARAMETER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITION
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	$I_c=1\text{mA}$ $E_e=0\text{mw/cm}^2$
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	$I_E=100\ \mu\text{A}$ $E_e=0\text{mw/cm}^2$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.4	V	$I_c=0.5\text{mA}$ $E_e=20\text{mw/cm}^2$
Rise Time	T_r		5		μs	$V_{CE}=30\text{V}$ $I_C=800\ \mu\text{A}, R_L=1\text{K}$
Fall Time	T_f		5		μs	
Collector Dark Current	I_{CEO}			100	nA	$V_{CE}=10\text{V}$ $E_e=0\text{mw/cm}^2$
On State Collector Current	$I_p(on)$	1		2	mA	$V_{CE}=5\text{v}$ $E_e=1\text{mw/cm}^2$ $P=940\text{nm}$
		2		4	mA	
		4		8	mA	
		8			mA	



LIGITEK

LIGITEK ELECTRONICS CO.,LTD.

Property of Ligitek Only

PART NO.LPT3323/TRS-1

Page 2/3

• Dimensions Symbol Information

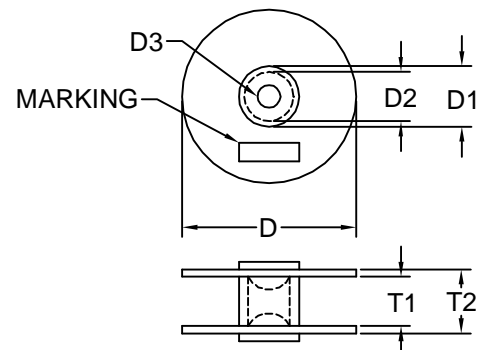
SYMBOL ITEMS	OPTION CODE	SYMBOL	SPECIFICATIONS				
			Minimum		Maximum		
			mm	inch	mm	inch	
Tape Feed Hole Diameter	-----	D	3.8	0.15	4.2	0.17	
Component Lead Pitch	-----	F	2.3	0.09	3.0	0.12	
Front-To-Rear Deflection	-----	△H	-----	-----	2.0	0.08	
Feed Hole To Bottom Of Component	TRS-1	H1	17.5	0.69	18.5	0.73	
Feed Hole To Overall Component Height	-----	H2	-----	-----	36	1.42	
Lead Length After Component Height	-----	L	W0		11.0	0.43	
Feed Hole Pitch	-----	P	12.4	0.49	13.0	0.51	
Lead Location	-----	P1	4.4	0.17	5.8	0.23	
Center Of Component Location	-----	P2	5.1	0.2	7.7	0.3	
Overall Taped Package Thickness	-----	T	-----	-----	1.42	0.06	
Feed Hole Location	-----	W0	8.5	0.33	9.75	0.38	
Adhesive Tape Width	-----	W1	14.5	0.57	15.5	0.61	
Adhesive Tape Position	-----	W2	0	0	4.0	0.16	
Tape Width	-----	W3	17.5	0.69	19.0	0.75	

REMARK:TRS=Tape And Reel Straight Leads

• Dimensions Symbol Information

• Package Dimensions

Description	Symbol	Specification			
		minimum		maximum	
		mm	inch	mm	inch
Reel Diameter	D	78.2	3.08	380	14.96
Core Diameter	D1	34.9	1.37	102	4.02
Hub Recess Inside Diameter	D2	28.6	1.13	88.0	3.46
Arbor Hole Diameter	D3	13.8	0.54	38.1	1.5
Overall Reel Thickness	T2			57.2	2.25
Iside Reel Flange Thickness	T1	30.0	1.18	50.0	1.97
Quantity/Reel	1000PCS				



**Reliability Test:**

Test Item	Test Condition	Description	Reference Standard
Operating Life Test	1.Under Room Temperature 2.If=20mA 3.t=1000 hrs (-24hrs, +72hrs)	This test is conducted for the purpose of determining the resistance of a part in electrical and thermal stressed.	MIL-STD-750: 1026 MIL-STD-883: 1005 JIS C 7021: B-1
High Temperature Storage Test	1.Ta=85°C±5°C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of high temperature for hours.	MIL-STD-883:1008 JIS C 7021: B-10
Low Temperature Storage Test	1.Ta=-40°C±5°C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of low temperature for hours.	JIS C 7021: B-12
High Temperature High Humidity Test	1.Ta=65°C±5°C 2.RH=90%~95% 3.t=240hrs±2hrs	The purpose of this test is the resistance of the device under tropical for hours.	MIL-STD-202:103B JIS C 7021: B-11
Thermal Shock Test	1.Ta=105°C±5°C & -40°C±5°C (10min) (10min) 2.total 10 cycles	The purpose of this is the resistance of the device to sudden extreme changes in high and low temperature.	MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1011
Solder Resistance Test	1.T.Sol=260°C±5°C 2.Dwell time= 10±1sec.	This test intended to determine the thermal characteristic resistance of the device to sudden exposures at extreme changes in temperature when soldering the lead wire.	MIL-STD-202: 210A MIL-STD-750: 2031 JIS C 7021: A-1
Solderability Test	1.T.Sol=230°C±5°C 2.Dwell time=5±1sec	This test intended to see soldering well performed or not.	MIL-STD-202: 208D MIL-STD-750: 2026 MIL-STD-883: 2003 JIS C 7021: A-2