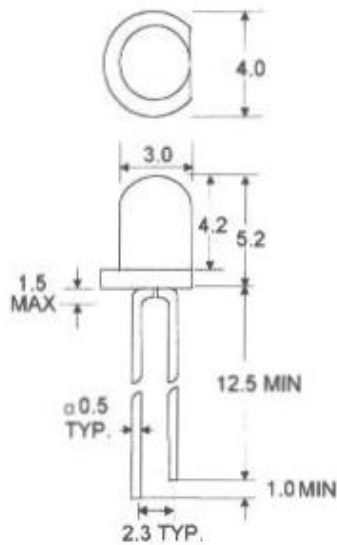


**NPN SILICOM PHOTOTRANSISTOR LED LAMPS LPT2021 SERIES**

*Package Dimension*



*Features*

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

*Description*

The LPT2021 series are silicon nitride passivated NPN planar phototransistors with exceptionally stable characteristics and high illumination sensitivity the cases of LPT2021 are encapsulated in transparent plastic T1 package individually

Note: All dimension are in millimeter tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.

**. MAXIMUM RATINGS (TA=25°C)**

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

**. ELECTRICAL CHARACTERISTICS (TA=25°C)**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Collect-Emitter Breakdown Voltage	V(BR)CEO	30			v	Ic=1mA Ee=0mw/cm <sup>2</sup>
Emitter-Collector Breakdown Voltage	V(BR)ECO	5			v	Ie=100mA Ee=0mw/cm <sup>2</sup>
Collect-Emitter Saturation Voltage	VCE(sat)			0.4	v	Ic=0.5mA Ee=20mw/cm <sup>2</sup>
Rise Time	tr		5		μs	Vce=30v Ic=800μA, RL=1KΩ
Fall Time	tf		5		μs	
Collector Dark Current	Iceo			100	nA	Vce=10v Ee=0mw/cm <sup>2</sup>
On State Collector Current	Ip(on)	1		2	mA	Vce=5v Ee=1mW/cm <sup>2</sup> λ=940nm
		2		4	mA	
		4		8	mA	
		8			mA	