

**LIGITEK**

<p><b>NPN SILICOM PHOTOTRANSISTOR LED LAMPS</b>      <b>LPT2023</b>      <b>SERIES</b></p> <p style="text-align: center;"><i>Package Dimension</i></p> <p style="font-size: small;">Note: All dimension are in millimeter tolerance is + 0.25mm unless otherwise noted.</p>	<p style="text-align: center;"><i>Features</i></p> <ul style="list-style-type: none"> <li>• High illumination sensitivity</li> <li>• Stable characteristics</li> <li>• Spectrally and mechanically matched with IR emitter</li> </ul> <p style="text-align: center;"><i>Description</i></p> <p>The LPT2023 series are silicon nitride passivated NPN planar phototransistors with exceptionally stable characteristics and high illumination sensitivity the cases of LPT2023 are encapsulated in clear plastic T1 package individually</p>
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. 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	