

# Ø5 PIN SILICON PHOTO TRANSISTOR LED LAMPS

PART NO: NFL-5012PTC

REV NO: 1.0

PAGE: 1/2

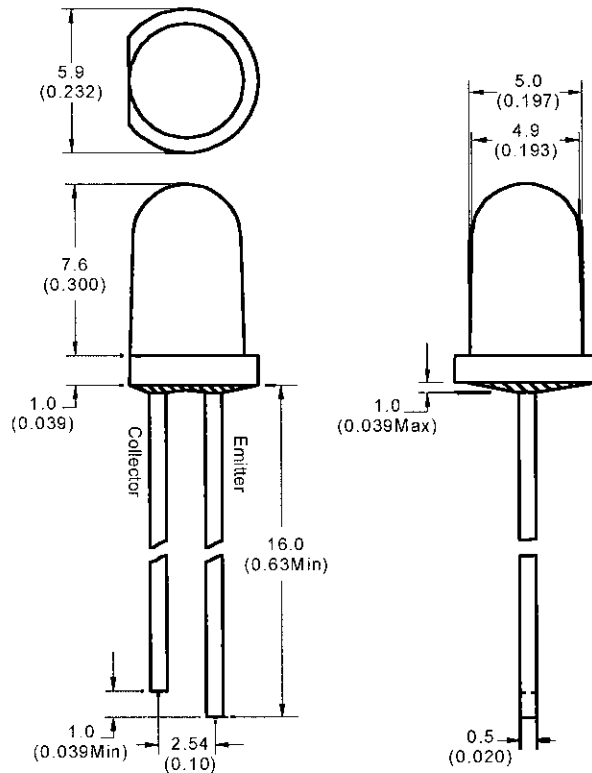
- Features:

- High illumination sensitivity.
- Stable characteristics.

- Descriptions:

- The NFL-5012PTC is a silicon nitride passivated NPN planar phototransistors with exceptionally stable characteristics and high illumination sensitivity the cases of NFL-5012PTC is encapsulated in clear plastic T1 3/4 package individually.

- Package Dimensions:



## NOTES:

1. All dimension are in millimeters(inch).
2. An epoxy meniscus may extend about 1.5mm down to the lead.
3. Tolerances unless dimension •  $\pm 0.25$ mm.

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PAGE: 2/2

## • Absolute Maximum Ratings at Ta=25

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_d$	100	mW
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	30	V
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	5	V
Operation Temperature	$T_{OPR}$	-40 to +80	• •
Storage Temperature	$T_{STG}$	-40 to +85	• •
Lead Soldering Temperature	$T_{SOL}$	Max.260• 5• • for 3 sec Max. (1.6mm from the base of the epoxy bulb)	• •

## • Electronic Optical Characteristics at Ta=25

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	30	-	-	V	• $I_{CEO}=100\mu A$
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	5	-	-	V	• $I_{ECO}=100\mu A$
Collector-Base Breakdown Voltage	$BV_{CBO}$	40	-	-	V	• $I_{CBO}=100\mu A$
Collect-Emitter Saturation Voltage	$V_{CE(SAT)}$	-	0.2	0.4	V	• $I_B=1mA$ • $I_C=2mA$
Dark Current	$I_{CEO}$	-	-	100	nA	• $V_{CE}=20V$
Rise/Fall Time	$T_r/T_f$	-	5/5	-	$\mu S$	$R_L=1000\bullet \bullet$ $V_{CE}=10V$
On State Collector Current	$I_P$	1		2	mA	• $V_{CE}=5V$ $H=1mW/cm^2$ $\lambda=940nm$
		2		4	mA	
		4		8	mA	
		8			mA	