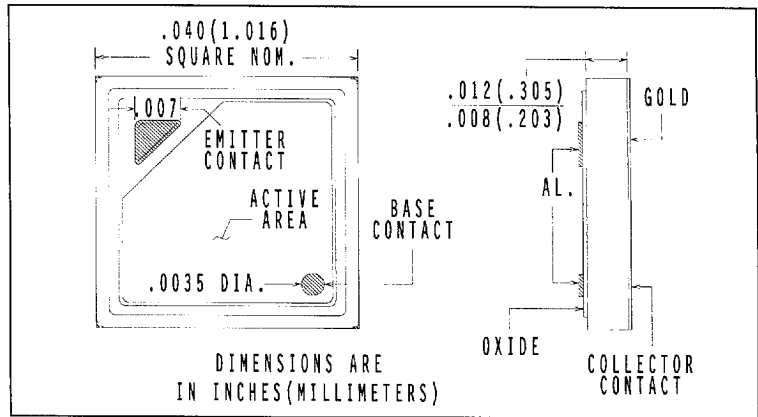
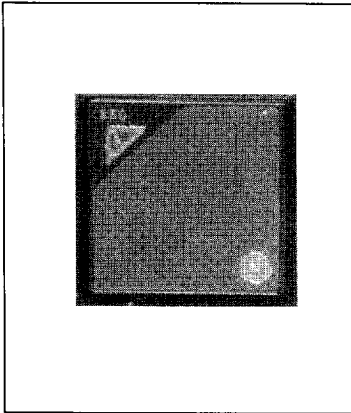


NPN Silicon Phototransistor Chip Type OPC260



Features

- 2.7 times the active area of OPC200
- More sensitive at low light levels
- Active area centered on chip

Description

Optek Technology photosensor chips are fabricated using the latest silicon planar diffused technology and are silicon nitride passivated for long term stability. All photosensors have an anti-reflective coating over the active area to ensure maximum absorption of irradiated light. Chips can be specially probed for custom requirements.

Optek chip warranty excludes any damage resulting from improper bonding or alloying techniques.

Packaging Options

OPC260VP Vials
OPC260TP Sawn on Tape
OPC260WP Waffle Pack
OPC260SP Unsawn Slice
Special packaging and testing available upon request. Special transistor arrays available upon request

Replaces

OPC60X

Absolute Maximum Ratings⁽¹⁾ ($T_A = 25^\circ\text{C}$ unless otherwise noted)

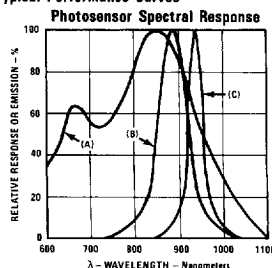
Operating Temperature	-40° C to +85° C
Storage Temperature	-65° C to +150° C
Collector-Emitter Voltage	30 V
Emitter-Collector Voltage	5.0 V
Power Dissipation	50 mW ⁽²⁾

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	30	60		V	$I_C = 100\mu\text{A}$
$V_{(BR)ECO}$	Emitter-Collector Breakdown Voltage	5.0	7.5		V	$I_E = 100\mu\text{A}$
I_{CEO}	Collector Dark Current		<1	100	nA	$V_{CE} = 10.0\text{V}, \Phi = 0\mu\text{W}$
R_λ	Responsivity		0.25		A/W	$V_{CE} = 5\text{V}, \Phi = 10\mu\text{W}^{(3)}$
h_{FE}	Current Gain	50				$V_{CE} = 5.0\text{V}, I_C = 1\text{mA}$

Notes: (1) All maximum ratings are determined with the chip mounted on a dimpled TO-18 header using Optek techniques. (2) Maximum power dissipation is a function of the package in which the chip is housed and the environment in which the assembled package will be used. (3) Light source is a GaAs LED, $\lambda_P = 935\text{ nm}$, typical.

Typical Performance Curves



Test Conditions (LED):
 $T_A = T_J = 25^\circ\text{C}; I_C = 100\text{ mA}, DC = 6.1\%, PW = 100\mu\text{s}$
Peak Wavelength - λ_P : (A) XSTR - $850 \pm 30\text{ nm}$
(B) LED GaAlAs - $880 \pm 20\text{ nm}$
(C) LED GaAs - $935 \pm 15\text{ nm}$

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