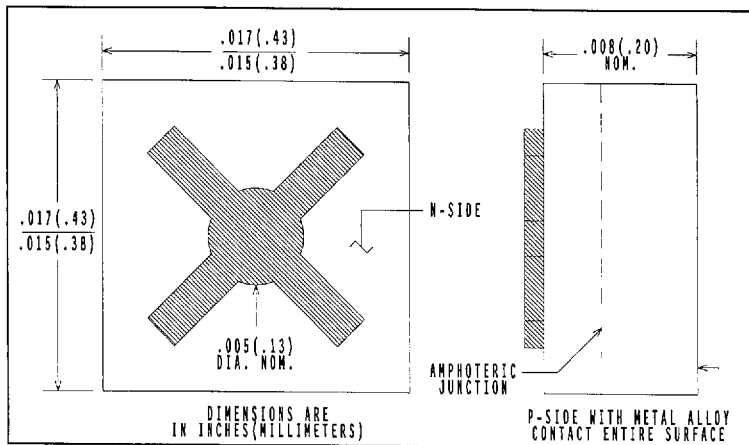
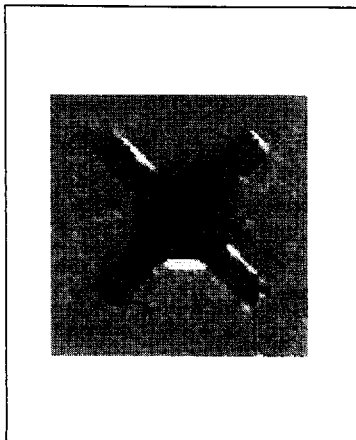


# GaAlAs Infrared Emitter Chip Type OPC216



## Features

- High infrared radiation output
- Low degradation
- Microalloyed gold contacts

## Description

Infrared emitting diode chips are fabricated by solution epitaxial techniques which provide high efficiency, long operating life, and minimum degradation. Spectral emission is centered at 890 nanometers.

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

## Packaging Options

OPC216VP	Vials
OPC216TP	Sawn on Tape
OPC216WP	Waffle Pack

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

Storage and Operating Temperature	$-55^\circ\text{C}$ to $+150^\circ\text{C}$
Forward DC Current	150 mA <sup>(2)</sup>
Peak Forward Current (1 $\mu\text{s}$ pulse width, 300 pps)	3.0 A
Power Dissipation	200 mW

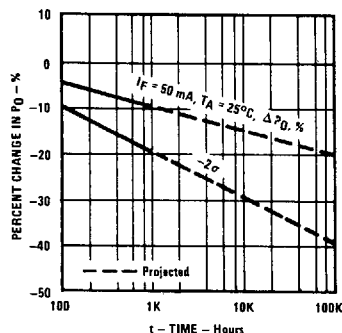
## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
$V_R$	Reverse Voltage	2.0			V	$I_R = 10\ \mu\text{A}$
$V_F$	Forward Voltage		1.95		V	$I_F = 100\ \text{mA}$
$P_O$	Radiant Power Output	4.0	7.5		mW	$I_F = 100\ \text{mA}$ <sup>(3)</sup>

**Notes:** (1) All maximum ratings are determined with the chip mounted on a dimpled TO-46 header using Optek techniques. (2) Maximum operating current is a function of the package in which the chip is housed and the environment in which the assembled package will be used. (3) Typical wavelength at peak emission is 890 nm.

## Typical Performance Curves

### Percent Change in Power Output vs Time



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Optek reserves the right to make changes at any time in order to improve design and to supply the best product possible.

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