Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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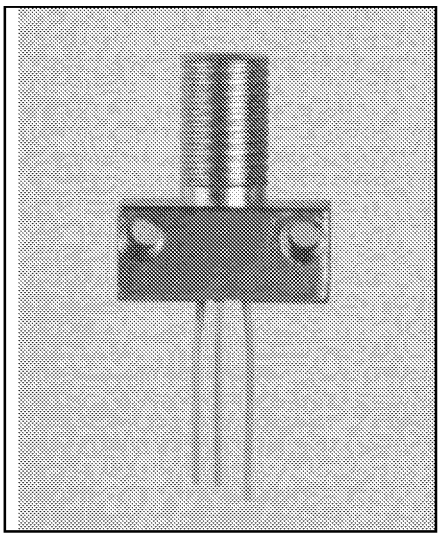
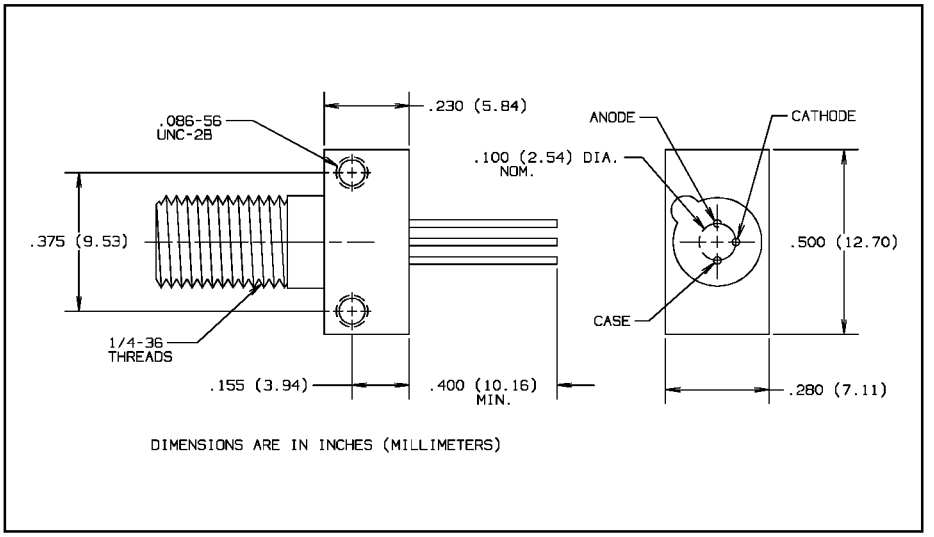
Fiber Optic GaAlAs LED in SMA Receptacle
Types OPF371A, OPF371B, OPF371C, OPF371D





Features

- Component pre-mounted and ready to use
- Pre-tested with fiber to assure performance
- Popular SMA style receptacle

Description

The OPF371 series LED consists of a low cost plastic cap LED, pre-mounted and aligned in an SMA receptacle. This configuration is designed for PC board or panel mounting. Includes lock washer and jam nut, two 2-56 screws, and a dust cap.

The LED's are designed to interface with mulitmode optical fibers from 50/125 to 200/300 microns.

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)

Reverse Voltage . . . . . 1.0 V
Continuous Forward Current . . . . . 100 mA(4)
Storage Temperature Range . . . . . -55° C to +100° C
Operating Temperature Range . . . . . -40° C to +85° C
Lead Soldering Temperature [1/16 inch (1.6 mm) from case for 5 sec. with soldering iron] . . . . . 240° C(1)

Notes:
(1) RMA flux is recommended. Duration can be extended to 10 sec. max when flow soldering.
(2) Graded index fiber, 50 µm core, N.A. = 0.20.
(3) To convert radiant power output to dBm, use the following expression: dBm = 10 log (µW/1000).
(4) Derate linearly @ 1.0 mA/° C above 25° C.
(5) Prebias @ 5 mA current.

LED Burn-in

All LED's are subject to 100% burn-in testing. Test conditions are 96 hours at 100 mA continuous current in 25° C ambient.

TYPICAL COUPLED POWER into OPTICAL FIBER

Typical Coupled Power I_F = 100 mA @ 25° C						
Fiber	**Refractive Index**	**N.A.**	**OPF371D**	**OPF371C**	**OPF371B**	**OPF371A**
50/125 µm	Graded	0.20	7.5 µW	12.5 µW	19 µW	29 µW
62.5/125 µm	Graded	0.28	27 µW	35 µW	51 µW	89 µW
100/140 µm	Graded	0.29	60 µW	87 µW	129 µW	200 µW
200/300 µm*	Step	0.41	320 µW	463 µW	606 µW	750 µW

*PCS - Plastic Clad Silica

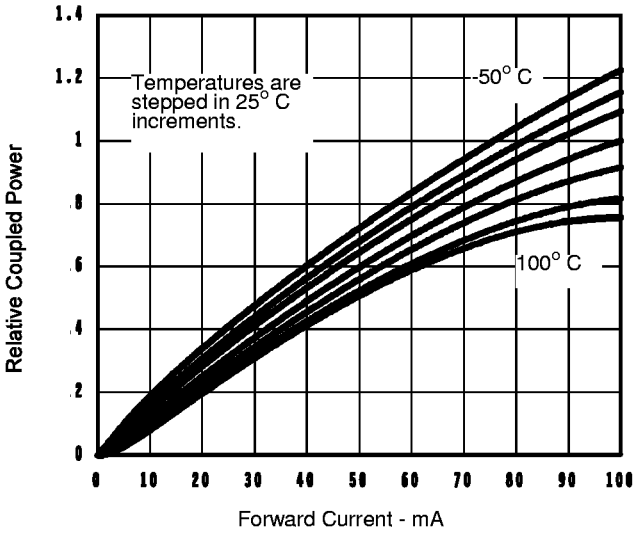
Types OPF371A, OPF371B, OPF371C, OPF371D

Electrical Characteristics (T_A = 25° C unless otherwise noted)

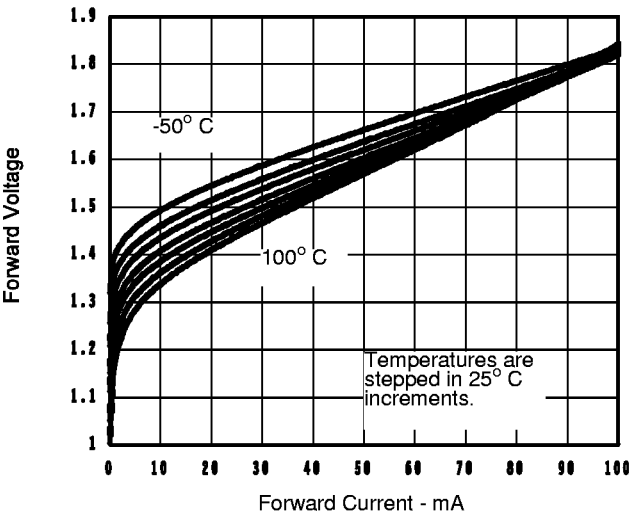
SYMBOL	PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_O	Radiant Power Output	OPF371D OPF371C OPF371B OPF371A	5.0 10.0 15.0 25.0	7.5 12.5 19.0 29.0		µW	I_F = 100 mA(2)
V_F	Forward Voltage			1.8	2.0	V	I_F = 100 mA
λp	Peak Output Wavelength		830	850	870	nm	I_F = 50 mA
B	Spectral Bandwidth Between Half Power Points			35		nm	I_F = 50 mA
t_r	Output Rise Time			6.0	8.0	ns	I_F = 100 mA, 10%-90%(5)
t_f	Output Fall Time			6.0	10.0	ns	I_F = 100 mA, 90%-10%(5)

Typical Performance Curves

Relative Coupled Power vs. Forward Current



Forward Voltage vs. Forward Current



FIBER OPTIC COMPONENTS