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!

Contact us

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Fiber Optic Transmitter

OPF395 Series

Features:

- Low Cost 850 nm LED technology
- Electrically isolated plastic cap package
- High thermal stability
- High optical coupling efficiency to multimode fiber
- Industrial temperature range
- 75 MHz Bandwidth

Description:

The OPF395 series fiber optic transmitters are high performance devices packaged for data communication links. This transmitter is an 850 nm GaAlAs LED and is specifically designed to efficiently launch optical power into fibers ranging in size from 50/125µm up to 200/300µm diameter fiber. Multiple power ranges with upper and lower limits are offered which allows the designer to select a device best suited for the application.

This product's combination of features including high speed and efficient coupled power makes it an ideal transmitter for integration into all types of data communications equipment.

Applications:

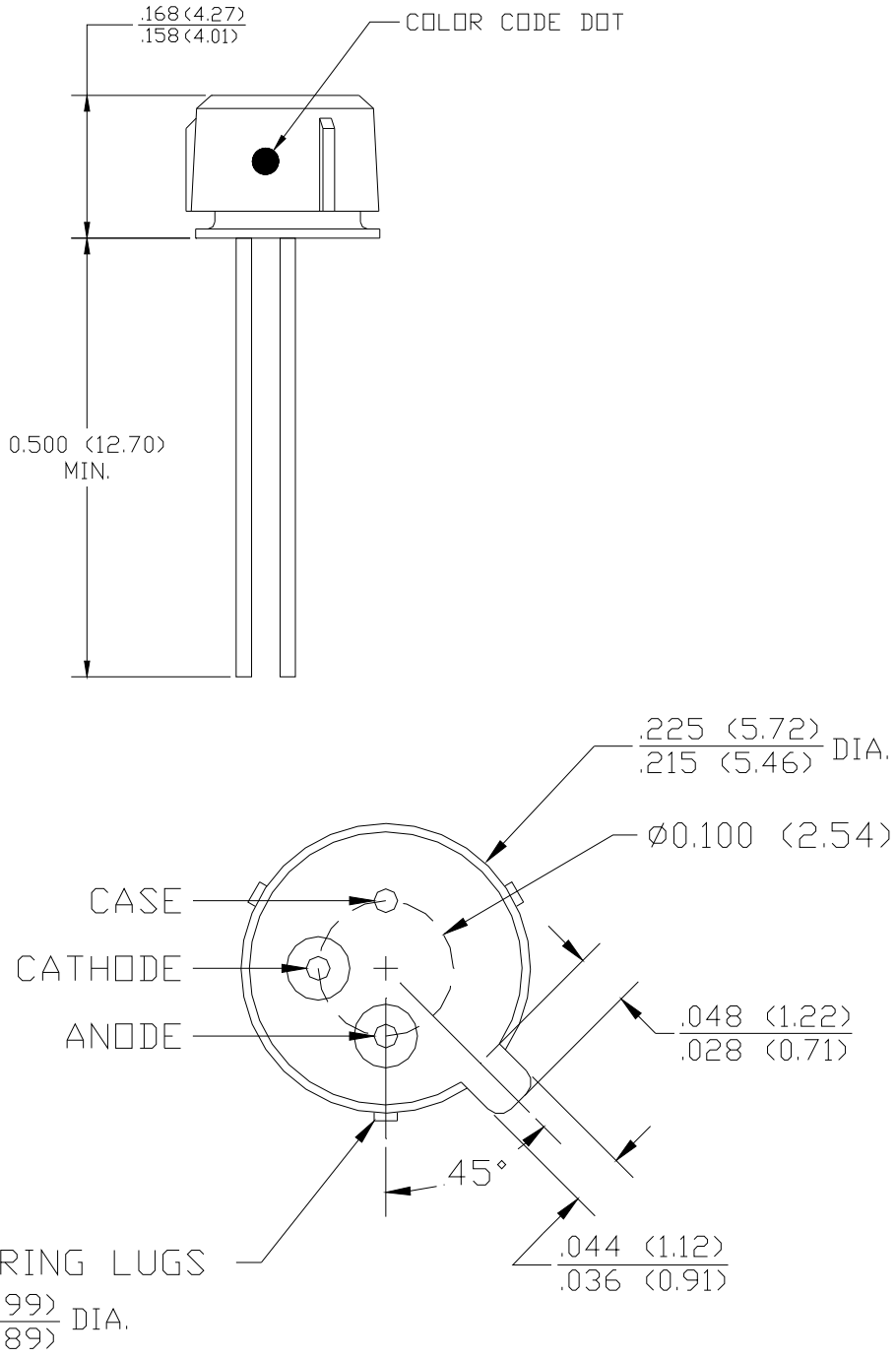
- Industrial Ethernet equipment
- Copper-to-fiber media conversion
- Intra-system fiber optic links
- Video surveillance systems

Typical Coupled Power I_F = 100mA, 25°C						
Fiber Size	**Type**	**N.A.**	**OPF395A**	**OPF395B**	**OPF395C**	**OPF395D**
50/125 µm	Graded Index	0.20	25µW	18µW	12.5µW	7.5µW
62.5/125 µm	Graded Index	0.28	75µW	45µW	35µW	27µW
100/140 µm	Graded Index	0.29	170µW	115µW	85µW	58µW
200/300 µm	Step Index	0.41	650µW	545µW	450µW	290µW

RoHS

OPTEK Technology, Inc.
1645 Wallace Drive, Carrollton, TX 75006|Ph: +1 972 323 2200
www.optekinc.com | www.ttelectronics.com

Mechanical Data



DIMENSIONS ARE IN INCHES (MILLIMETERS)

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Electrical Specifications

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)	
Storage Temperature Range	-55° C to +150° C
Operating Temperature Range	-40° C to +125° C
Lead Soldering Temperature[1]	260° C
Continuous Forward Current[2]	100 mA
Maximum Reverse Voltage	1.0 V

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

SYMBOL	PARAMETER		DOT	MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_{T50}[3]	Total Coupled Power	OPF395A	Orange	20.0	25.0		µW	I_F = 100 mA
		OPF395B	Green	15.0	18.0			
	50/125 mm Fiber NA = 0.20	OPF395C	Black	10.0	12.5			
		OPF395D	Silver	5.0	7.5			
V_F	Forward Voltage				1.8	2.2	V	I_F = 100 mA
V_R	Reverse Voltage			1.8			V	I_R = 100 µA
λ	Wavelength			830	850	870	nm	I_F = 50 mA
Δλ	Optical Bandwidth				35		nm	I_F = 50 mA
t_r,t_f	Rise and Fall Time				3.5	4.5	ns	I_F = 100 mA; 10% to 90%[4]

Notes:
1. Maximum of 5 seconds with soldering iron. Duration can be extended to 10 seconds when flow soldering. RMA flux is recommended.
2. De-rate linearly at 1.0mA /°C above 25°C .
3. The component must be actively aligned into the mating fiber cable assembly to achieve optimal performance.
4. No Pre-bias.
5. All Optek fiber optic LED products are subjected to 100% burn-in as part of its quality control process. The burn-in conditions are 96 hours at 100mA drive current and 25°C ambient temperature.

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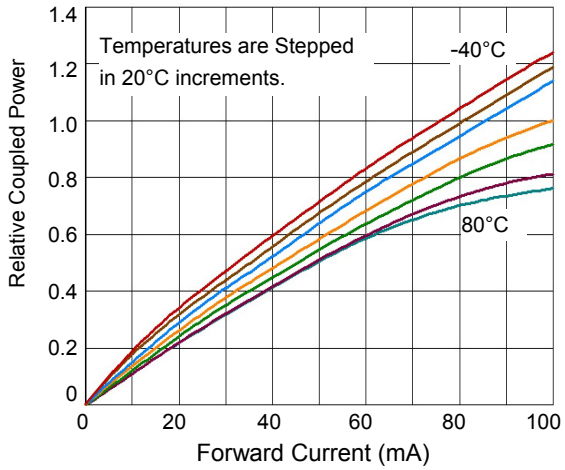
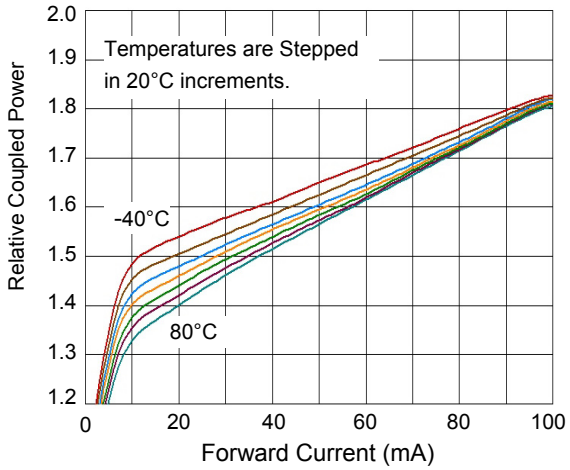
Performance

Relative Coupled Power vs. Forward Current



Typical Forward Voltage vs. Forward Current



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