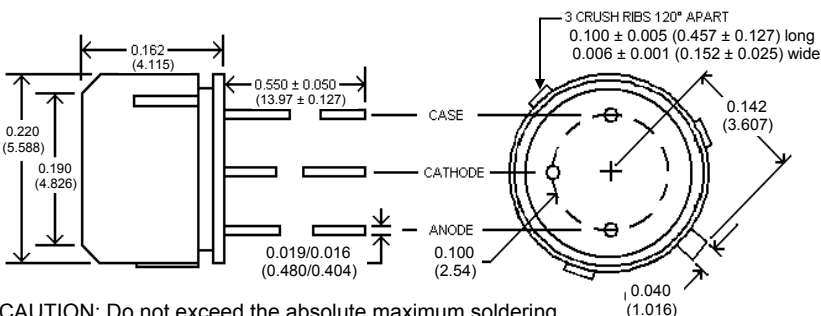
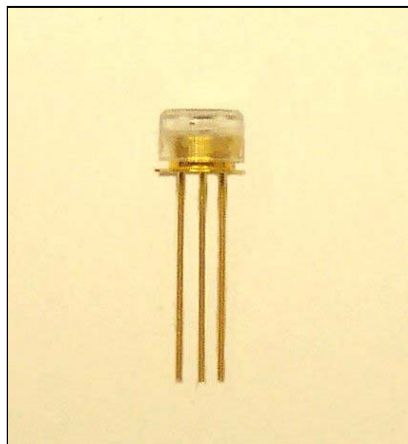


CFE370 Series

Fiber Optic AlGaAs IREDs



April, 2004



CAUTION: Do not exceed the absolute maximum soldering temperature and time duration shown in note 1.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)

features

- High power output
- High speed
- Optimized for fiber-optic applications
- TO-18 header with plastic lens

description

The CFE370 series contain 850nm AlGaAs IREDs mounted on TO-18 headers. The devices are designed to self-align in the 0.228" (5.79mm) bore of a standard fiber-optic receptacle. Three crush ribs on the outside of the case provide press-fit installation and precise alignment.

absolute maximum ratings ($T_A = 25^\circ\text{C}$ unless otherwise stated)

storage temperature	-55°C to +115°C
operating temperature	-40°C to +100°C
lead soldering temperature ⁽¹⁾	260°C
reverse voltage	5VDC
continuous forward current ⁽²⁾	100mA

notes:

1. 1/16" (1.6mm) from case for 5 seconds maximum.
2. Derate linearly 1.07mA/°C from 25°C free air temperature to $T_A = +100^\circ\text{C}$.

electrical characteristics ($T_A = 25^\circ\text{C}$, unless otherwise noted)

symbol	parameter	min	typ	max	units	test conditions
P_O	Total power output	25	29	-	μW	$I_F = 100\text{mA}^{(3)}$
		15	20	-		
		5	-	-		
V_F	Forward voltage	-	1.8	2.2	V	$I_F = 100\text{mA}$
λ_P	Peak emission wavelength	-	850	-	nm	$I_F = 100\text{mA}$
BW	Spectral bandwidth at half power points	-	35	-	nm	$I_F = 100\text{mA}$
t_r	Output rise time	-	5.0	8.0	ns	$I_F = 100\text{mA}$, 10% - 90% ⁽⁴⁾
t_f	Output fall time	-	5.0	10	ns	$I_F = 100\text{mA}$, 90% - 10% ⁽⁴⁾

notes: 3. Graded index fiber, 50 μm core, N.A. = 0.20.

4. Prebias at 5mA.

Clairex reserves the right to make changes at any time to improve design and to provide the best possible product.

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