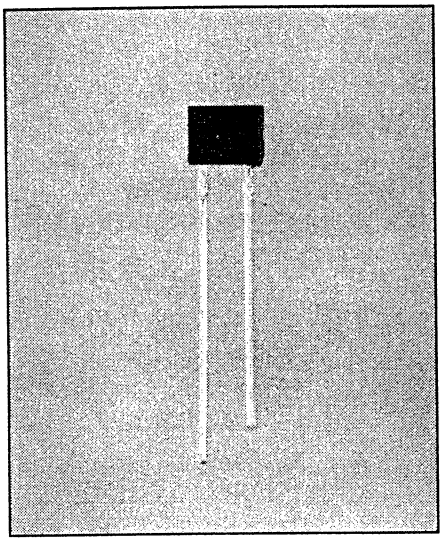
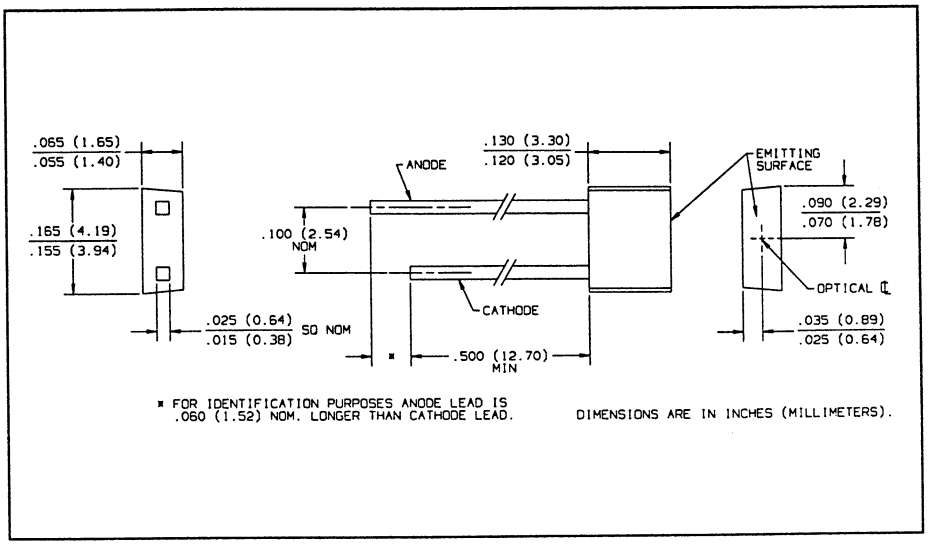
GaAs Plastic Infrared Emitting Diodes
Types OP168FA, OP168FB, OP168FC





Features

- Flat lensed for wide radiation angle
- Easily stackable on 0.100 inch (2.54mm) hole centers
- Mechanically and spectrally matched to the OP508F series phototransistor and the OP538F series photodarlingtons

Description

The OP168F series are gallium arsenide infrared emitting diodes molded in "end looking" miniature black plastic packages. This device has a wide radiation angle due to its flat emitting surface. Small size and 0.100 (2.54mm) lead spacing allow considerable design flexibility.

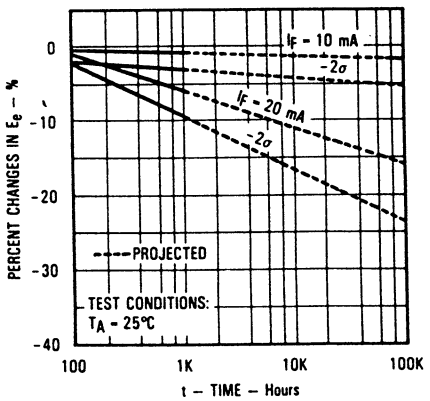
Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)

Continuous Forward Current	50 mA
Peak Forward Current (Pulse Width = 1 µsec, 300pps)	3.0 A
Reverse Voltage	2.0 V
Storage and Operating Temperature Range	-40° C to +100° C
Lead Soldering Temperature [1/16 inch (1.6mm) from case for 5 sec. with soldering iron)	260° C(1)
Power Dissipation	100 mW(2)

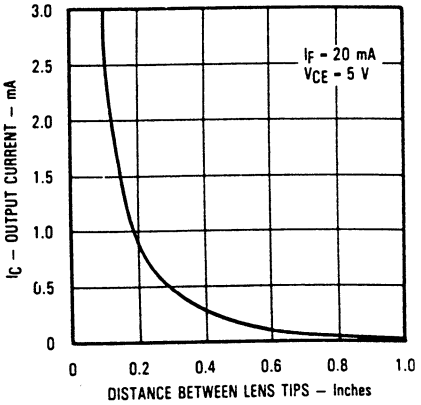
Notes:
(1) RMA flux is recommended. Duration can be extended to 10 seconds max. when flow soldering. Maximum 20 grams force may be applied to the leads when soldering.
(2) Derate linearly 1.33 mW/° C above 25° C.
(3) $E_{e(APT)}$ is a measurement of the average apertured radiant energy incident upon a sensing area 0.081" (2.06 mm) in diameter perpendicular to and centered on the mechanical axis of the "emitting surface" and 0.400" (10.16 mm) from the measurement surface. $E_{e(APT)}$ is not necessarily uniform within the measured area.

Typical Performance Curves

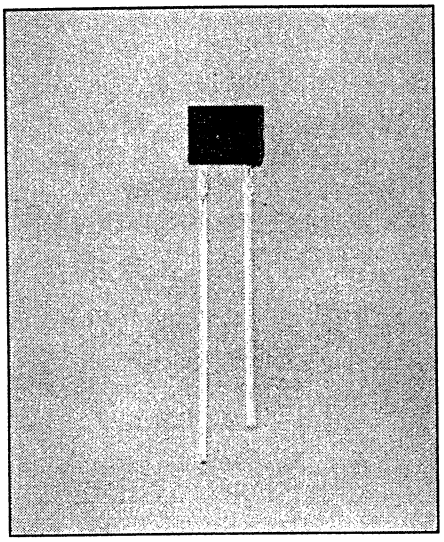
Percent Changes in Radiant Intensity vs. Time

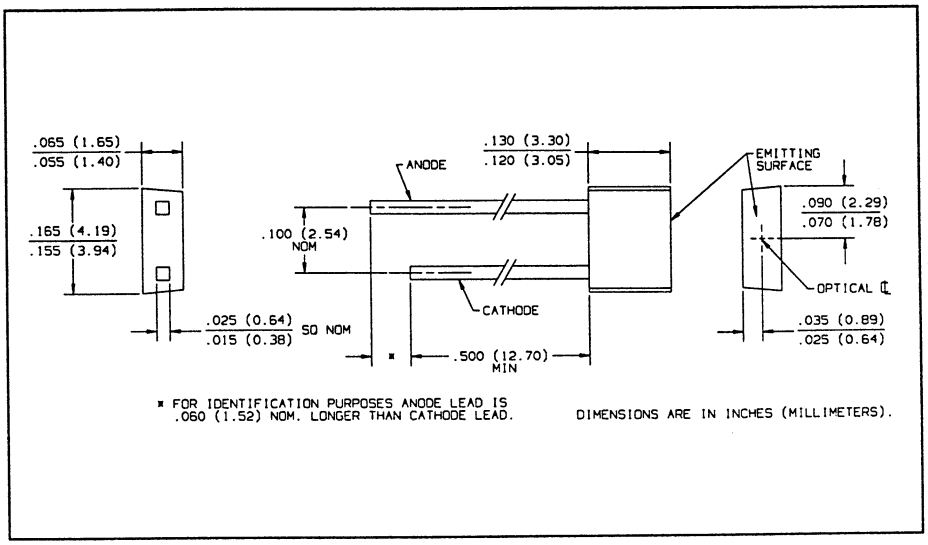


Coupling Characteristics of OP168F and OP508F/OP538F



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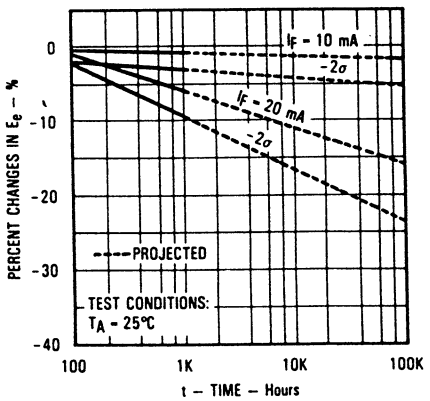
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