

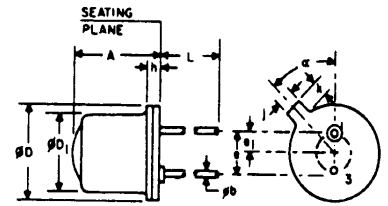
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# Infrared Emitter

## LED55B, LED55C, LED56, LED55BF, LED55CF, LED56F

### Gallium Arsenide Infrared-Emitting Diode

The GE Solid State LED55B-LED55C-LED56 Series are gallium arsenide, light emitting diodes which emit non-coherent, infrared energy with a peak wave length of 940 nanometers. They are ideally suited for use with silicon detectors. The LED55B, LED55C and LED56 devices have a lens which provides a narrow beam angle while the "F" versions have a flat window for a wide beam angle which is useful with external lensing.



LED55B , LED55C , LED56

absolute maximum ratings: (25°C unless otherwise specified)

**Voltage:**

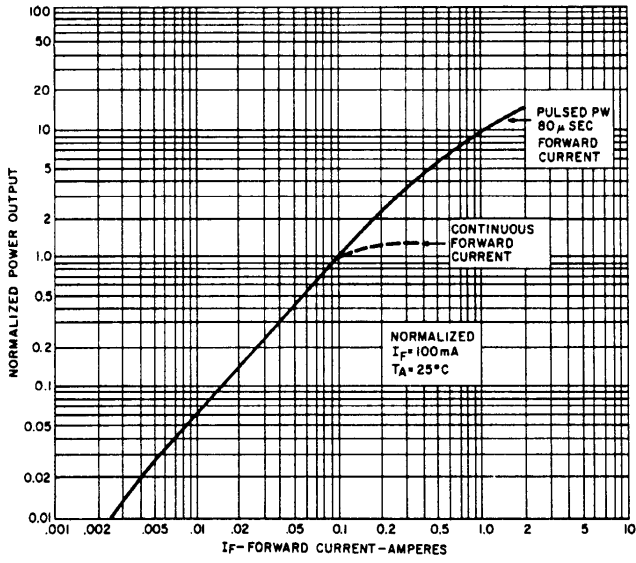
Reverse Voltage  $V_R$  3 volts

**Currents:**

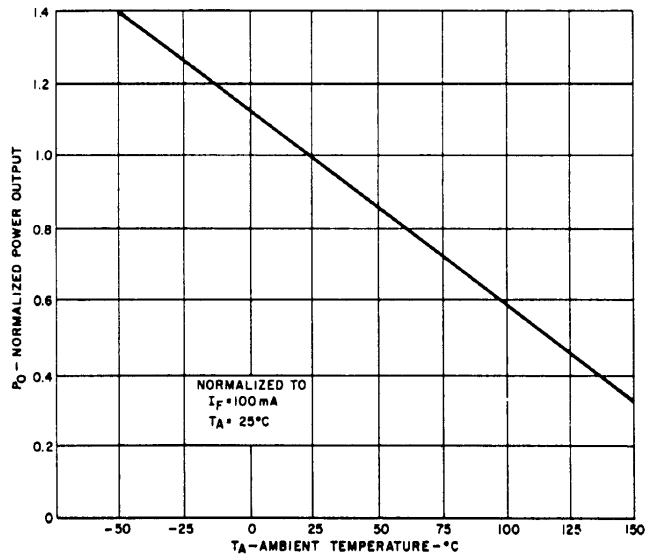
Forward Current Continuous  $I_F$  100 mA  
 Forward Current (pw 1  $\mu$ sec 200 Hz)  $I_F$  10 A

SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A		.255		6.47	
$\phi b$	.016	.021	.407	.533	
$\phi D$	.209	.230	5.31	5.84	
$\phi D_1$	.180	.187	4.57	4.77	
e	.100 NOM.		2.54 NOM.		?
$\phi_1$	.050 NOM.		1.27 NOM.		2

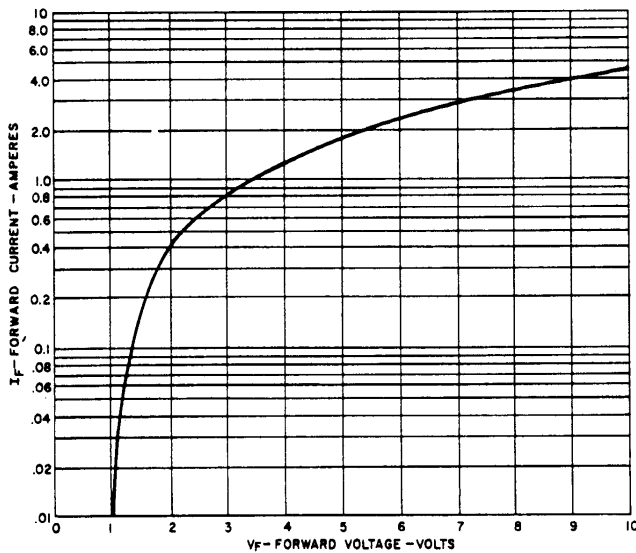
TYPICAL CHARACTERISTICS



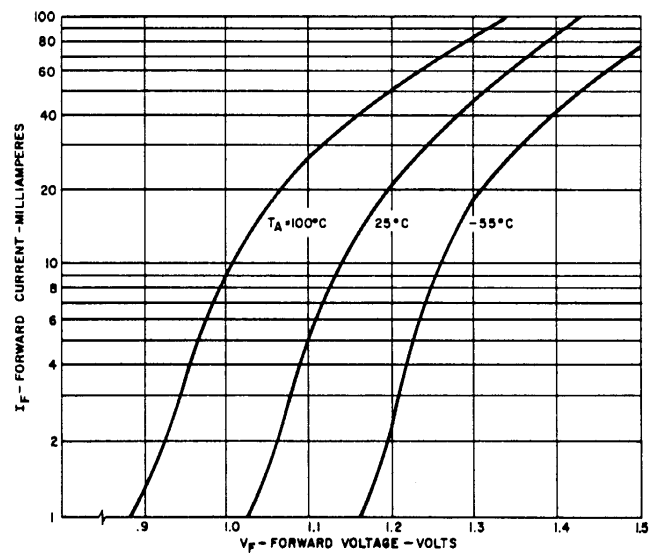
1. POWER OUTPUT VS. INPUT CURRENT



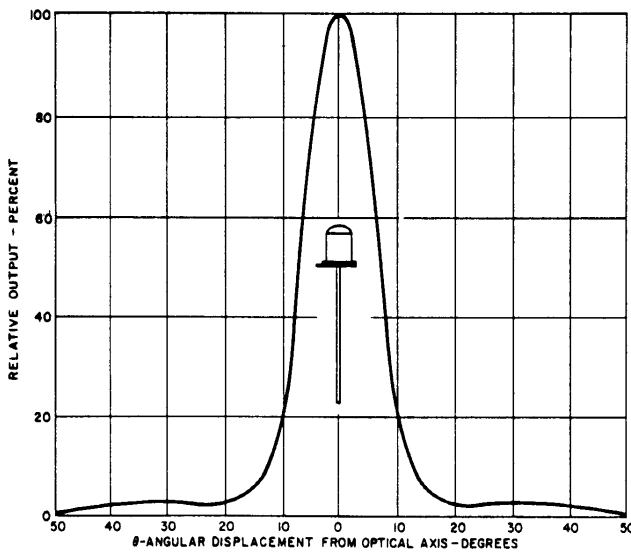
2. POWER OUTPUT VS. TEMPERATURE



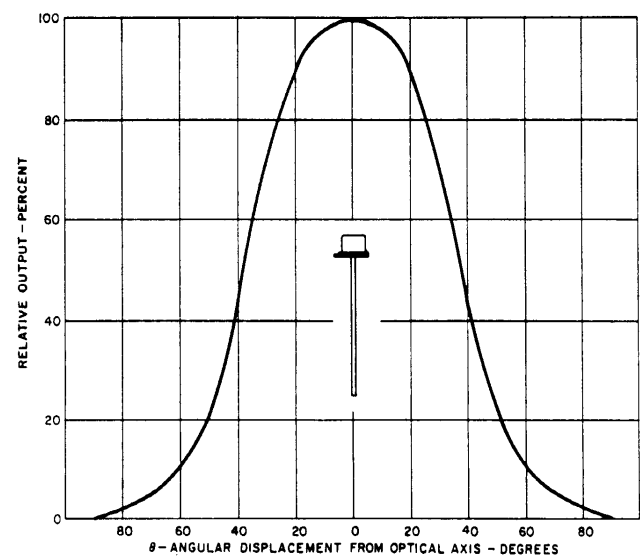
3. LED 55B, 55C, 56, 55BF, 55CF, 56F FORWARD VOLTAGE VS. FORWARD CURRENT



4. FORWARD VOLTAGE VS. FORWARD CURRENT



5. LED 55B, 55C, 56 TYPICAL RADIATION PATTERN



6. LED 55BF, 55CF, 56F TYPICAL RADIATION PATTERN

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