



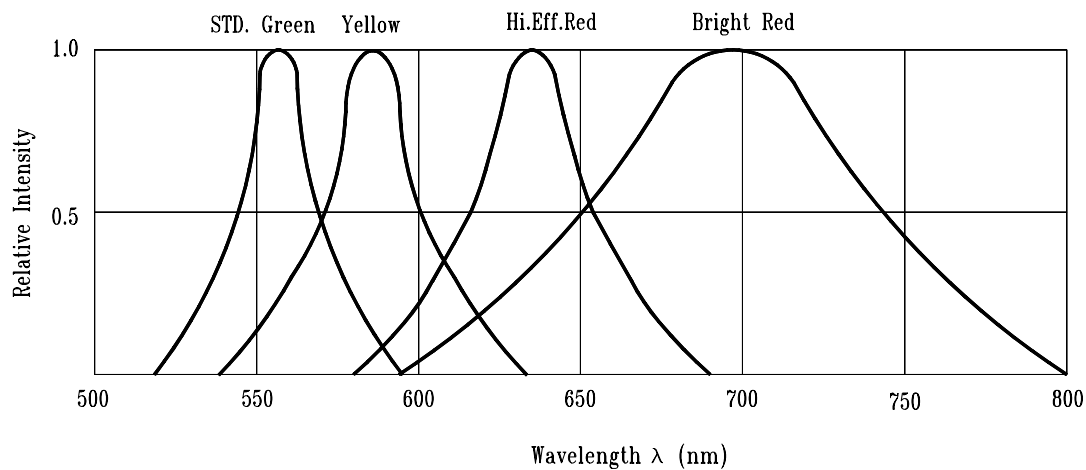


Fig.1 Relative Intensity vs. Wavelength

Electrical/Optical Characteristics at Ta=25°C

Parameter	Symbol	Part No. LTL-	Min.	Typ.	Max.	Unit.	Test Condition.
Luminous Intensity	I _v	709P 709E 709L 709Y	11 3.7 2.5 3.7	3.7 12.6 8.7 12.6		mcd	I _F =10 mA Note 1,4
Viewing Angle	2 θ 1/2	709x		38		deg	Note 2 (Fig.7)
Peak Emission Wavelength	λ _P	709P 709E 709L 709Y		697 635 560 585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ _d	709P 709E 709L 709Y		657 623 561 588		nm	Note 3
Spectral Line Half Width	Δλ	709P 709E 709L 709Y		90 40 30 35		nm	
Forward Voltage	V _F	709P 709E 709L 709Y		2.1 2.0 2.1 2.1	2.6 2.6 2.6 2.6	V	I _F =20mA
Reverse Current	I _R	709x			100	μA	V _R =5V
Capacitance	C	709P 709E 709L 709Y		55 20 35 15		pF	V _F =0 , f=1MHz

Notes: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3. The dominant wavelength, λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4.lv needs $\pm 15\%$ additionaly for guaranteed limits.

Typical Electrical/Optical Characteristic Curves (25°C Ambient Temperature Unless Otherwise Noted)

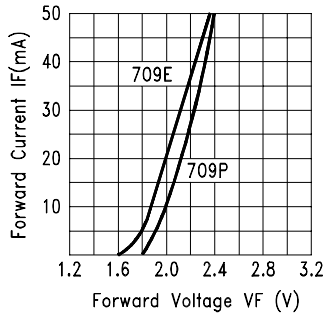


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

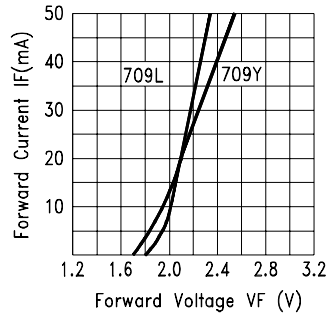


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE

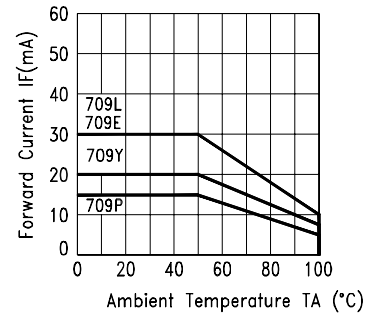


Fig.4 FORWARD CURRENT DERATING CURVE

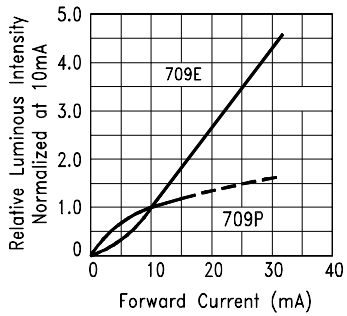


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

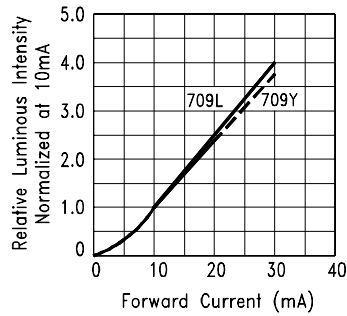


Fig.6 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

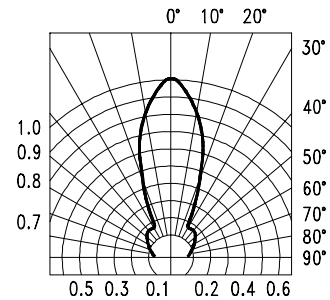


Fig.7 SPATIAL DISTRIBUTION

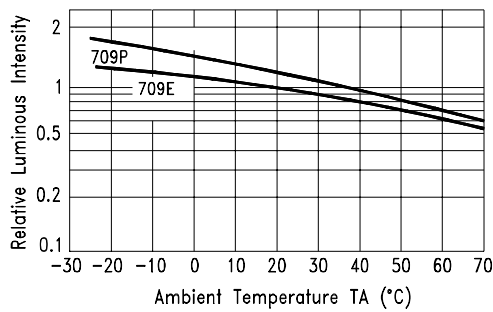


Fig.8 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

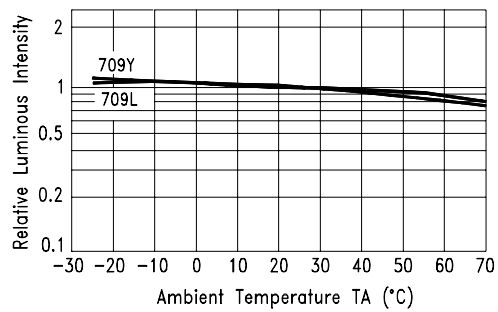


Fig.9 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE