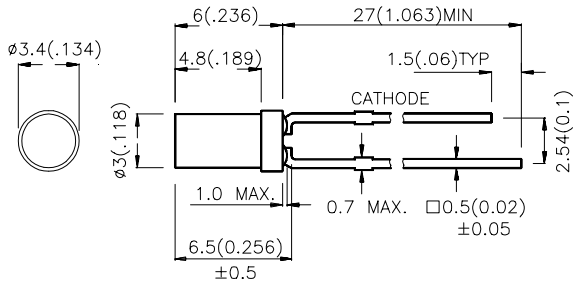
Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

T-1 (3mm) CYLINDRICAL LED LAMPS

E424IDT	HIGH EFFICIENCY RED
E424EDT	ORANGE
E424GDT	GREEN
E424YDT	YELLOW
E424SRDT	SUPER BRIGHT RED

Features

1.CYLINDRICAL TYPE, TOP DIFFUSED.
2.LOW POWER CONSUMPTION.
3.I.C. COMPATIBLE.
4.RELIABLE AND RUGGED.
5.LONG LIFE - SOLID STATE RELIABILITY.
6.AVAILABLE ON TAPE AND REEL.

Description

The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Selection Guide

Part No.	Emitting Color +Material	λD(nm)	Lens Type	Iv (mcd) @ 10 mA *20mA		Viewing Angle
				Min.	Typ.	2θ1/2
E424IDT	GaAsP/GaP	625	RED DIFFUSED	3	5	100°
E424EDT	GaAsP/GaP	625	ORANGE DIFFUSED	3	5	100°
E424GDT	GaP	568	GREEN DIFFUSED	1	4	100°
E424YDT	GaAsP/GaP	588	YELLOW DIFFUSED	1	4	100°
E424SRDT	GaAlAs	640	RED DIFFUSED	*40	*100	100°

Notes:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 20mA.

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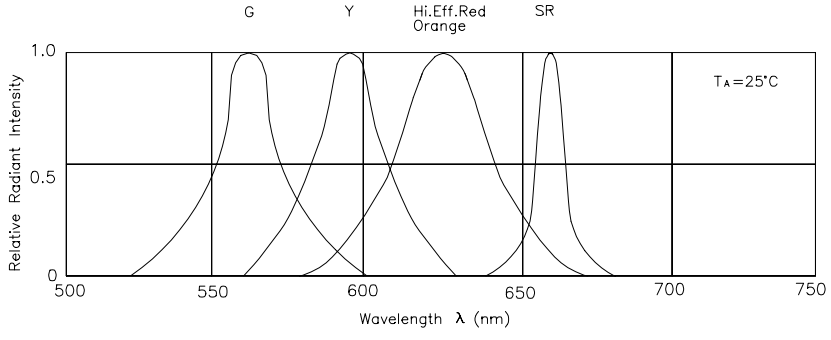
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Orange Green Yellow Super Bright Red	627 627 565 590 660		nm	I_F=20mA
λ D	Dominate Wavelength	High Efficiency Red Orange Green Yellow Super Bright Red	625 625 568 588 640		nm	I_F=20mA
Δλ1/2	Spectral Line Halfwidth	High Efficiency Red Orange Green Yellow Super Bright Red	45 45 30 35 20		nm	I_F=20mA
C	Capacitance	High Efficiency Red Orange Green Yellow Super Bright Red	15 15 15 20 45		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red Orange Green Yellow Super Bright Red	2.0 2.0 2.0 2.1 1.85	2.5 2.5 2.5 2.5 2.5	V	I_F=20mA
I_R	Reverse Current	All		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

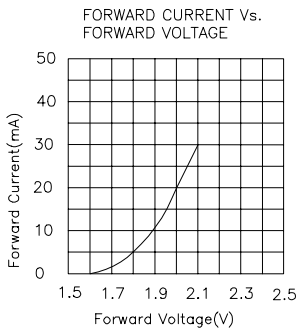
Parameter	High Efficiency Red	Orange	Green	Yellow	Super Bright Red	Units
Power dissipation	105	105	105	105	100	mW
DC Forward Current	30	30	25	30	30	mA
Peak Forward Current [1]	160	160	140	140	155	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Soldering Temperature [2]	260°C For 5 Seconds					

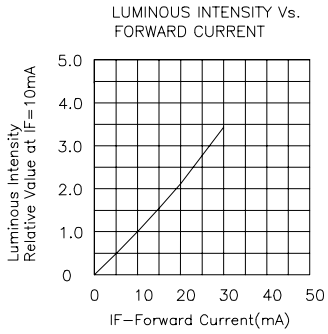
Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

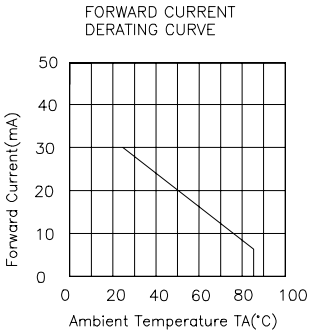


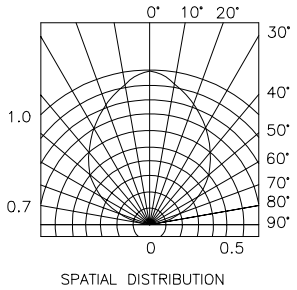
RELATIVE INTENSITY Vs. WAVELENGTH

High Efficiency Red E424IDT

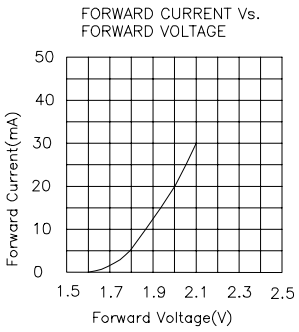


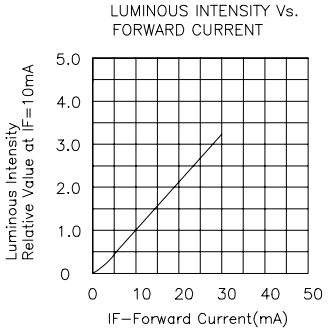


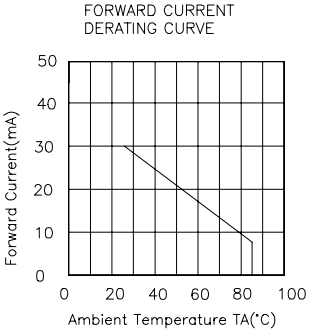


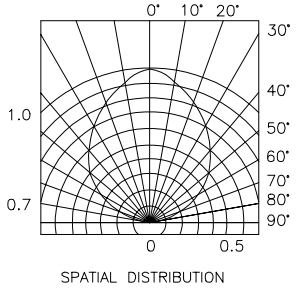


Orange E424EDT

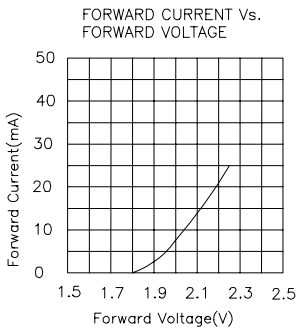


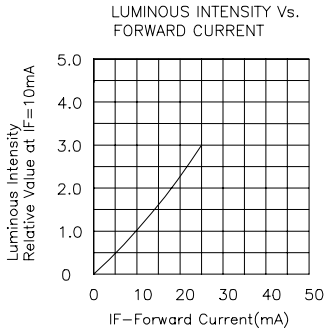


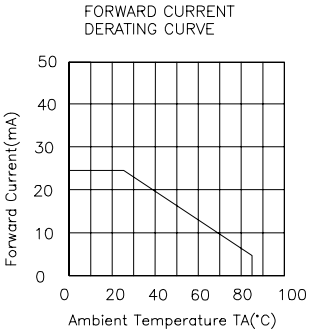


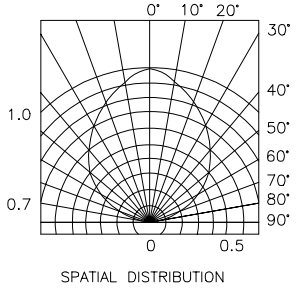


Green E424GDT



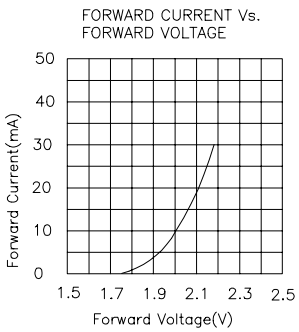


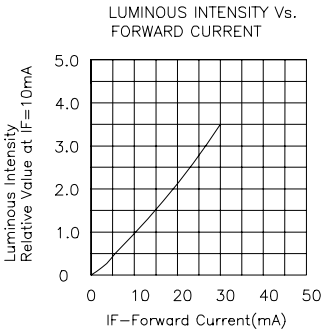


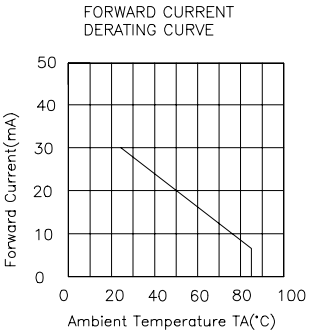


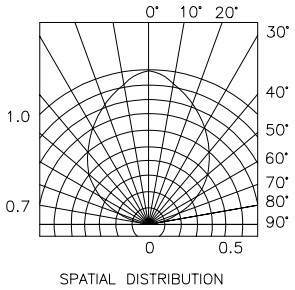
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Yellow E424YDT

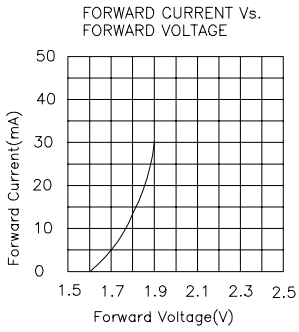


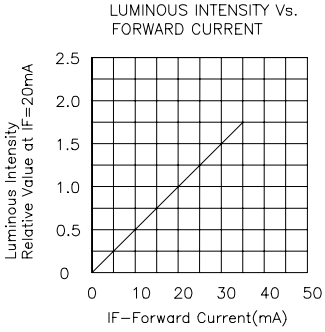


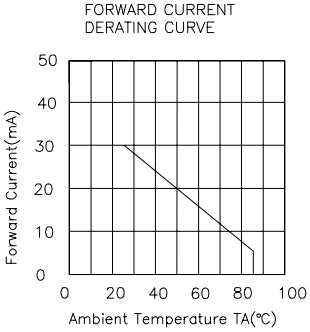


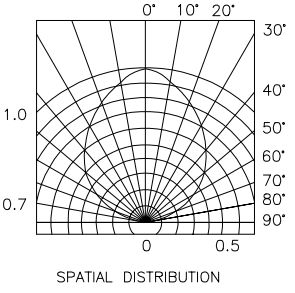


Super Bright Red E424SRDT









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