



**EXCEED PERSEVERANCE ELECTRONIC INDUSTRY CO., LTD.**

**深圳市超毅光电子有限公司**

**Φ 5.0mm BI-COLOR(MULTI-COLOR) WITH COMMON CATHODE LEDS.**

**Part Number:**

RL50-RD3YG139F1  
RL50-HY2YG339F1

RL50-HO3YG439F1  
RL50-SR2YG439F1

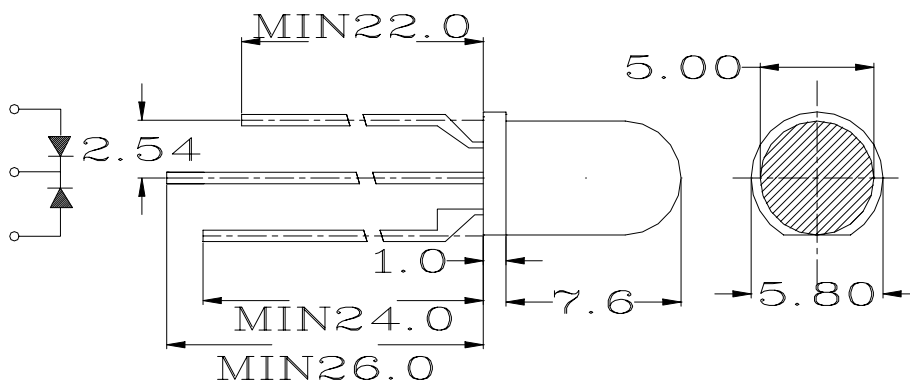
**Features**

- 1.LOW POWER CONSUMPTION.
- 2.RELIABLE AND RUGGED.
- 3.EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- 4.SUITABLE FOR LEVEL INDICATOR.
- 5.I.C COMPATIBLE.
- 6.LONG LIFE-SOLIDSTATE RELIABILTY.

**Notes:**

- 1.All dimensions are in millimeters (inches)
- 2.Tolerance is  $\pm 0.25(0.01'' )$  unless otherwise niter
- 3.Lead spacing is measured where the lead emerge package
- 4.Speciflcations are subject to change without notice

**Package Dimensions**



**Selection Guide**

Part NO.	Lens Type	Chip			
		Material	IV (mcd)		Viewing Angle
			@10mA	*20mA	
Min.	Typ.	2 θ 1/2			
RL50-RD3YG1 39F1	Bright Red Diffused	GaP/GaP	2.0	3.2	/
	Yellow Green Diffused	GaP/GaP	19	32	/
RL50-HO3YG43 9F1	Orange Red Diffused	GaAsP/GaP	22	35	/
	Yellow Green Diffused	GaP/GaP	19	32	/
RL50-HY2YG33 9F1	Yellow Diffused	GaAsP/GaP	15	27	/
	Yellow Green Diffused	GaP/GaP	15	28	/
RL50-SR2YG43 9F1	Super Red Diffused	GaAlAs/GaAs	34	60	/
	Yellow Green Diffused	GaP/GaP	25	43	/

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2the optical centerline value.

2. \*Luminous intensity with measured at 20mA.



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**Electrical/Optical characteristics at TA=25°C.**

Symbol	Parameter	Device	Type.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Bright Red Orange Red Yellow Yellow Green Super Red	700 630 585 570 660		nm	IF=20mA
$\lambda_D$	Dominate Wavelength	Bright Red Orange Red Yellow Yellow Green Super Red	690 610 580 560 640		nm	IF=20mA
$\Delta \lambda_{1/2}$	Spectral Line Halfwit	Bright Red Orange Red Yellow Yellow Green Super Red	45 45 35 30 20		nm	IF=20mA
C	Capacitance	Bright Red Orange Red Yellow Yellow Green Super Red	40 15 20 15 45		pF	VF=0V; f=1MHZ
VF	Forward Voltage	Bright Red Orange Red Yellow Yellow Green Super Red	2.1 2.0 2.0 2.1 1.8	2.8 2.4 2.8 2.8 2.8 2.8	V	IF=20mA
IR	Reverse Current	All		10	uA	VR=5V

**Absolute Maximum Ratings at TA=25°C.**

Parameter	Bright Red	Orange Red	Yellow	Super Red	Yellow Green	Units
Power dissipation	45	100	85	110	100	mW
DC Forward Current	25	25	25	25	25	mA
Peak Forward Current	50	160	160	200	160	mA
Reverse Voltage	5	5	5	5	5	V

**NOTES:**

- 1.Operating temperature: 40°C. TO 80°C.
- 2.Lead soldering: 260°C for 5 seconds.