

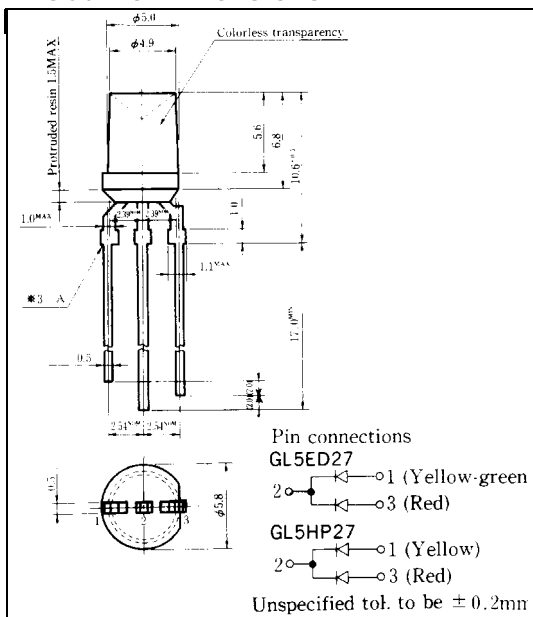
GL5□□27 Series $\phi 5\text{mm(T-1 } \frac{3}{4})$ Cylinder Type (Inverted . one) LED Lamps

Model No.

GL5ED27 Yellow-green
Red
GL5HP27 Yellow
Red

GaP
GaAsP/GaP
GaAsP/GaP
GaP

Outline Dimensions (Unit: mm)



Features

1. $\phi 5\text{mm(T-1 } \frac{3}{4})$ inverted cone type all resin. mold
2. Radiation color
GL5ED27 : Red, yellow-green and orange (mixed color)
GL5HP27 : Red, yellow and orange (mixed color)
3. Colorless transparency lens type
4. For backlighting

Absolute Maximum Ratings

(Ta = 25°C)

Parameter		Symbol	GL5ED27		GL5HP27		Unit
			Yellow-green	Red	Yellow	Red	
※1 Power dissipation		P	84	84	50	35	mW
Continuous forward current		I _F	30	30	20	15	mA
※2 Peak forward current		I _{FM}	50	50	50	50	mA
Derating factor	DC		0.40	0.40	0.27	0.20	mA/°C
	Pulse		0.67	0.67	0.67	0.67	mA/°C
Reverse voltage		V _R	5		5		v
Operating temperature		T _{opr}	-25 to +85				°C
Storage temperature		T _{stg}	-25 to +100				°C
※3 Soldering temperature		T _{sol}	260 (within 5 seconds)				°C

※1 The value of power dissipation is specified under the condition that either yellow-green or red/yellow or red is lightened separately. When the both diodes of yellow-green and red/yellow or red are lightened simultaneously, the power dissipation of each diode should be less than the half of the value specified in this table.

※2 Duty ratio= 1/10, Pulse width = 0.1ms

※3 At the (A) position of above outline dimensions

SHARP

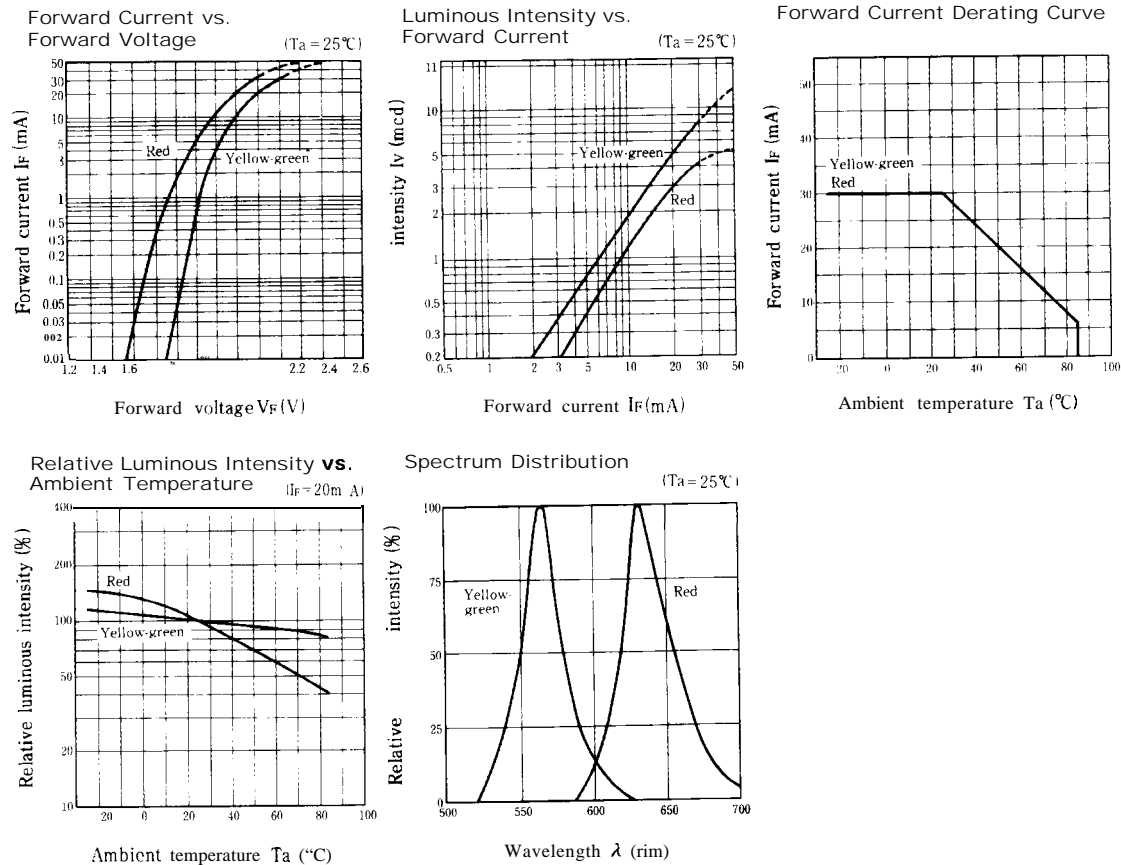
GL5ED27 (Yellow-green/Red)

Electro-optical Characteristics (Ta=25°C)

Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	VF	Yellow-green	IF=20mA	—	2.1	2.8	V
		Red	IF=20mA	—	2.0	2.8	
※4 Luminous intensity	IV	Yellow-green	IF=20mA	2.0	5.0	—	mcd
		Red	IF=20mA	1.0	3.0	—	
Peak emission wavelength	λp	Yellow-green	IF=20mA	—	565	—	nm
		Red	IF=20mA	—	635	—	
Spectrum radiation bandwidth	Δλ	Yellow-green	IF=20mA	—	30	—	nm
		Red	IF=20mA	—	35	—	
Reverse current	IR	Yellow-green	VR=4V	—	—	10	μA
		Red	VR=4V	—	—	10	
Terminal capacitance	Ct	Yellow-green	V=0V f=1 MHz	—	35	—	pF
		Red	V=0V f=1MHz	—	20	—	
Response frequency	fc	Yellow-green	—	—	4	—	MHz
		Red	—	—	4	—	

※4 Tolerance: ±30%

Characteristics Diagrams



GL5HP27 (Yellow/Red)

■ Electro-optical Characteristics (Ta=25℃)

Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	VF	Yellow	IF=15mA	—	1.9	2.5	V
		Red	IF=10mA	—	2.0	2.4	
※4 Luminous intensity	IV	Yellow	IF=15mA	0.50	2.0	—	mcd
		Red	IF=10mA	0.40	1.0	—	
Peak emission wavelength	λp	Yellow	IF=15mA	—	585	—	nm
		Red	IF=10mA	—	695	—	
Spectrum radiation bandwidth	Δλ	Yellow	IF=15mA	—	30	—	nm
		Red	IF=10mA	—	100	—	
Reverse current	IR	Yellow	VR=4V	—	—	10	μA
		Red	VR=4V	—	—	10	
Terminal capacitance	Ct	Yellow	V=0V f=1MHz	—	35	—	pF
		Red	V=0V f=1 MHz	—	55	—	
Response frequency	fc	Yellow	—	—	4	—	MHz
		Red	—	—	4	—	

※4 Tolerance: ±30%

■ Characteristics Diagrams

