

SPR-54 series

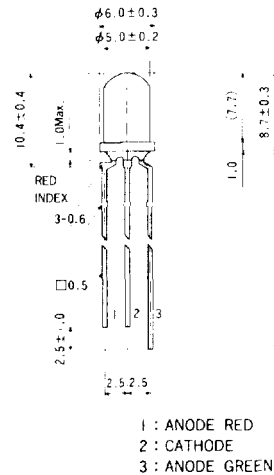
LED, 50 mm diameter, two color, direct mount

The SPR-54 series LEDs are small, reflecting, dual color LEDs.

Features

- two LED per package
- size of lens = 5.0 mm
- height as low as 8.7 mm
- mounting pitch as small as 2.5 mm
- available in red/green with milky white lens
- available in bulk

Dimensions (Units : mm)



Selection guide

Part no	SPR-54MVW
Color & wavelength	Red, 650 nm:Green, 563 nm
Lens	Milky white
Availability	semi-std

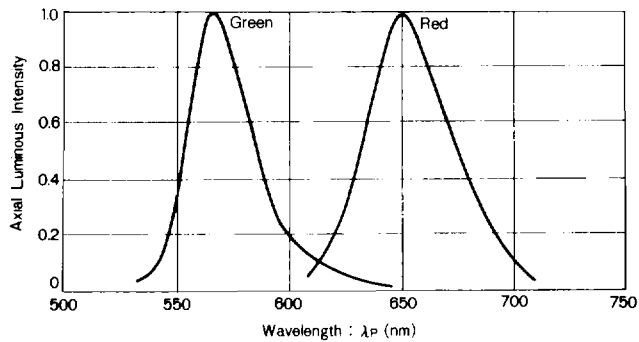
Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Red	Green	Unit	Conditions
Power dissipation	P_d	60	75	mW	
Forward current	I_F	20	25	mA	
Peak forward current	I_{FP}	60		mA	Pulse width 1 ms, duty 20%
Reverse voltage	V_R	3		V	
Operating temperature	T_{opr}	-25 ~ +85		$^\circ\text{C}$	
Storage temperature	T_{stg}	-30 ~ +100		$^\circ\text{C}$	

Electro-optical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Red			Green			Unit	Conditions
		Min	Typical	Max	Min	Typical	Max		
Forward voltage	V_F		2.0	3.0		2.1	3.0	V	$I_F = 10\text{ mA}$
Reverse current	I_R			10			10	μA	$V_R = 3\text{ V}$
Peak wavelength	λ_p		650			563		nm	$I_F = 10\text{ mA}$
Spectral half-width	$\Delta\lambda$		40			40		nm	$I_F = 10\text{ mA}$
Emission power half angle	$2\theta_{1/2}$		40			40		deg	Diffused
Luminous intensity	I_V	2.2	6.3		3.0	10.0		mcd	$I_F = 10\text{ mA}$

Figure 1 Luminous intensity



Electrical characteristic curves (Red, Green)

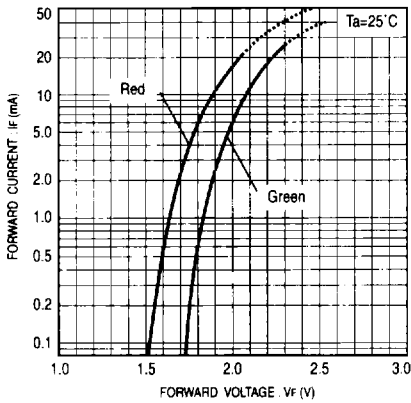


Figure 2

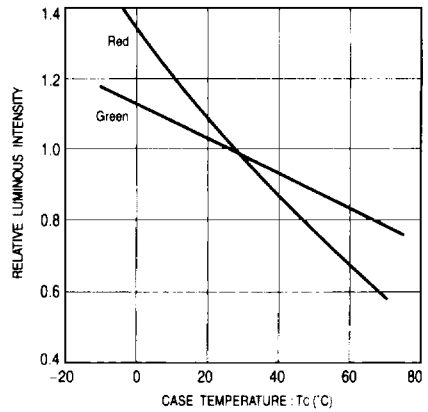


Figure 3

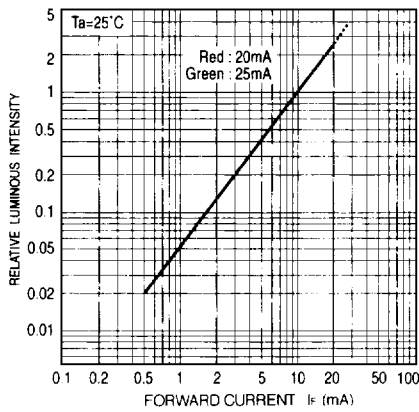


Figure 4

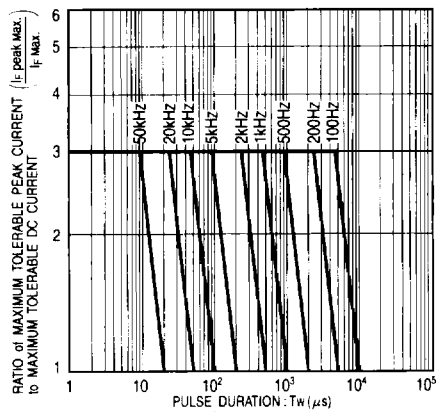


Figure 5

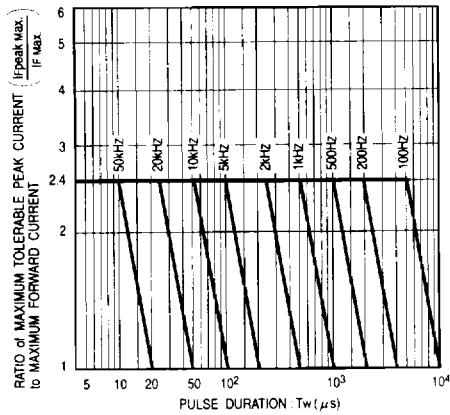


Figure 6

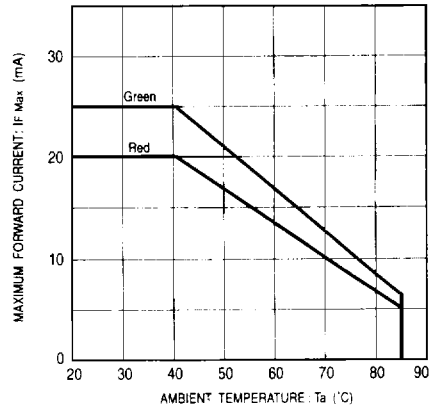


Figure 7

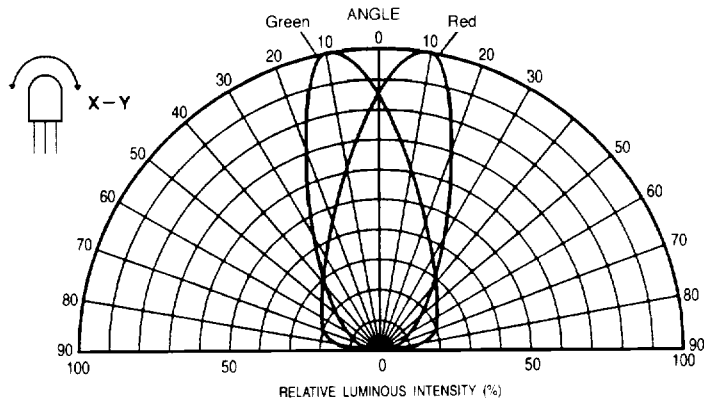


Figure 8 Directional pattern (Red/green)