

SPB-25 series

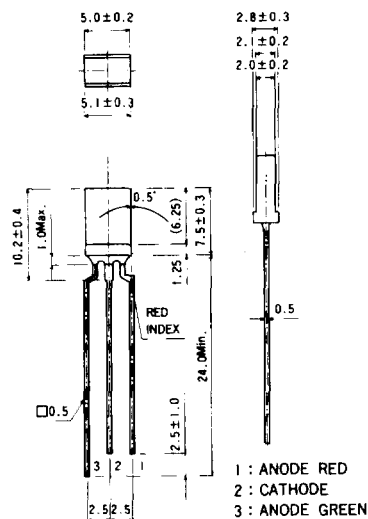
LED, 2 x 5 mm, rectangular, two color

The SPB-25 series LEDs are small, reflecting, dual color LEDs.

Features

- two LED per package
- size of lens = 2.0 × 5.0 mm
- height as low as 6.0 mm
- mounting pitch as small as 2.5 mm
- available in red/green only with milky white lens
- uniform light emitting surface
- high reliability and excellent heat tolerance
- available in bulk

Dimensions (Units : mm)



Selection guide

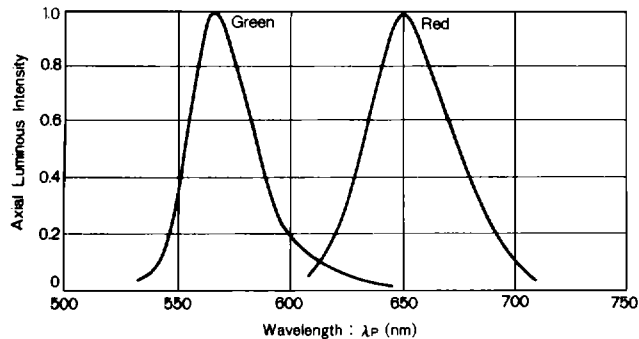
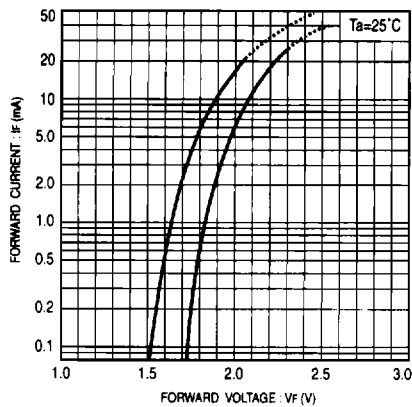
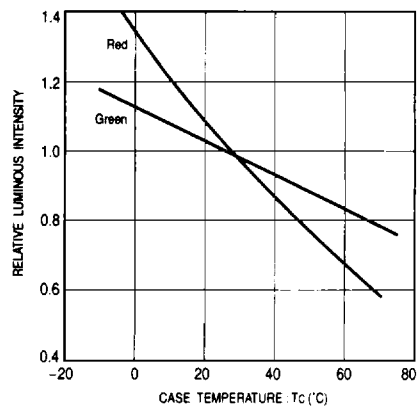
Part no	SPB-25MVW
Color & wavelength	Red, 650 nm:Green, 563 nm
Lens	Milky white
Availability	semi-std

Absolute maximum ratings (T_a = 25°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		°C	
Storage temperature	T _{stg}	-30 ~ +100		°C	

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

Parameter	Symbol	Red			Green			Unit	Conditions
		Min	Typ	Max	Min	Typ	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	$2\theta_{1/2}$		100			100		deg	Diffused
Luminous intensity	I_V	0.36	1.0		0.36	1.0		mcd	$I_F = 10\text{ mA}$

Figure 1 Luminous intensity**Electrical characteristic curves (Red and green)****Figure 2****Figure 3**

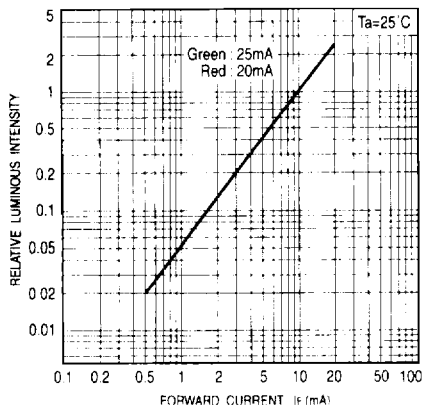


Figure 4

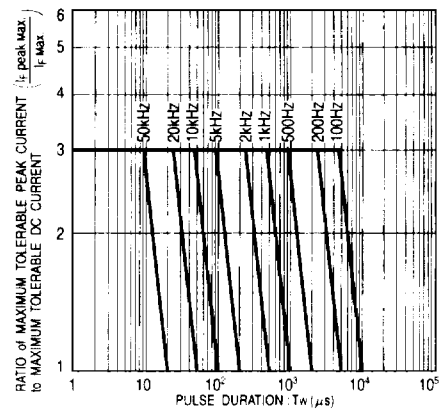


Figure 5

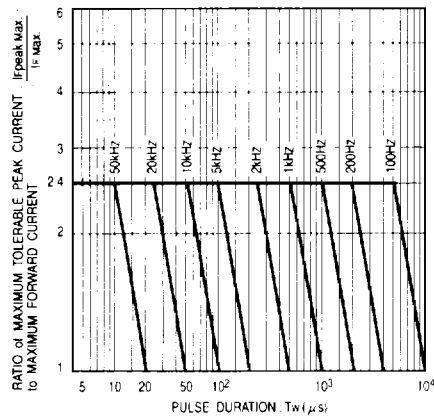


Figure 6

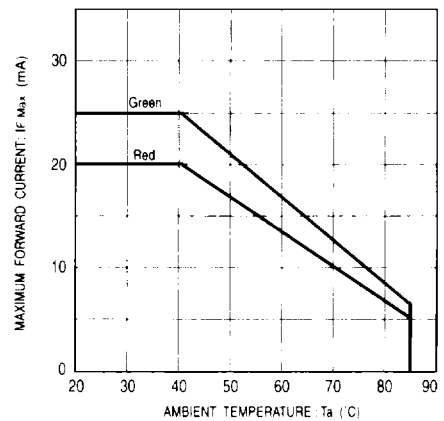


Figure 7

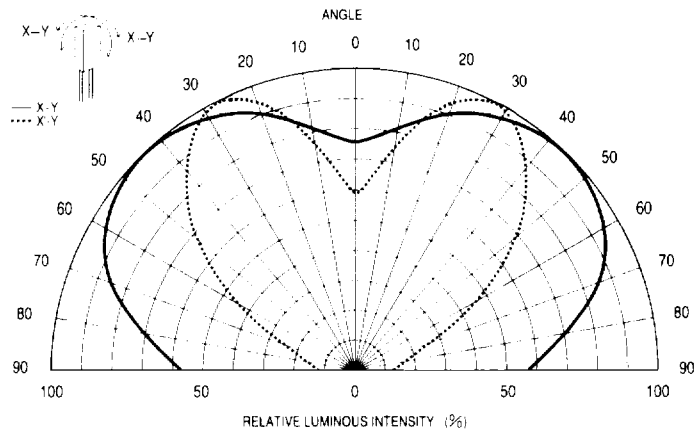


Figure 8 Directional pattern (Red/green)