

# SLR-37 series

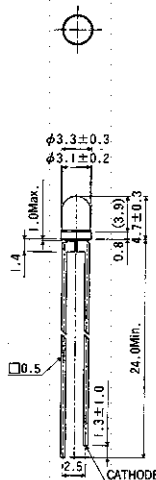
LED, reflecting, high brightness, 3.0 mm

The SLR-37 series LEDs are small, reflecting, high brightness single color LEDs.

## Dimensions (Units : mm)

### Features

- single LED per package
- diameter of lens = 3.1 mm
- height as low as 4.7 mm
- mounting pitch as small as 2.5 mm
- available in red, orange, yellow, and green with a choice of tinted diffused or tinted non-diffused lens
- available on tape for mounting by an automatic machine



### Selection guide

Part no	SLR-37VR	SLR-37DU	SLR-37YY	SLR-37MG
Color & wavelength	Red, 650 nm	Orange, 610 nm	Yellow, 585 nm	Green, 563 nm
Lens	Tinted diffused	Tinted diffused	Tinted diffused	Tinted diffused
Availability	semi-std	semi-std	semi-std	semi-std
Part no	SLR-37VC			SLR-37MC
Color & wavelength	Red, 650 nm			Green, 563 nm
Lens	Tinted non-diffused			Tinted non-diffused
Availability	semi-std			semi-std

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

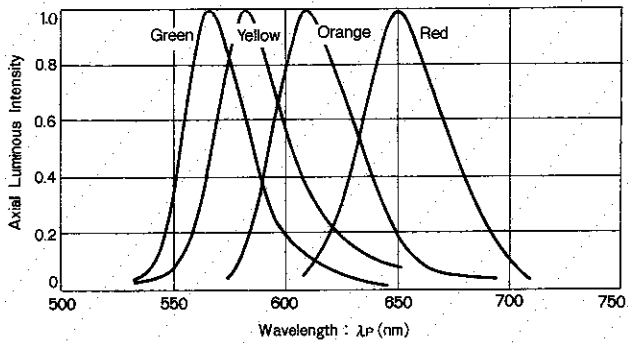
Parameter	Symbol	Red	Orange	Yellow	Green	Unit	Conditions
		SLR-37VR SLR-37VC	SLR-37DU	SLR-37YY	SLR-37MG SLR-37MC		
Power dissipation	$P_d$	60	60	60	75	mW	
Forward current	$I_F$	20	20	20	25	mA	
Peak forward current	$I_{FP}$	60	60	60	60	mA	Pulse width 1 ms, duty 20%
Reverse voltage	$V_R$	3	3	3	3	V	
Operating temperature	$T_{opr}$	-25 ~ +85				$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-30 ~ +100				$^\circ\text{C}$	

**SLR-37 series** Direct-mount LED lamps, high brightness, reflector type

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

Parameter	Symbol	Red		Orange		Yellow		Green		Unit	Conditions
		Typ	Max	Typ	Max	Typ	Max	Typ	Max		
Forward voltage	$V_F$	2.0	3.0	2.0	3.0	2.1	3.0	2.1	3.0	V	$I_F = 10\text{ mA}$
Reverse current	$I_R$		10		10		10		10	$\mu\text{A}$	$V_R = 3\text{ V}$
Peak wavelength	$\lambda_p$	650		610		585		563		nm	$I_F = 10\text{ mA}$
Spectral half-width	$\Delta\lambda$	40		40		40		40		nm	$I_F = 10\text{ mA}$
Emission power half angle	$2\theta_{1/2}$	50		55		55		50		deg	Non-diffused
		55		55		55		55			Diffused

**Luminous intensity**



**Luminous intensity**

Part no.	Color	$\lambda_p$	Min	Typical	Max	Unit	Conditions
SLR-37VR	Red	650	3.6	10		mcd	$I_F = 10\text{ mA}$
SLR-37VC			5.6	16		mcd	
SLR-37DU	Orange	610	3.6	10		mcd	
SLR-37YY	Yellow	585	3.6	10		mcd	
SLR-37MG	Green	563	5.6	16		mcd	
SLR-37MC			9.0	25		mcd	

Electrical characteristic curves 1 (Red)

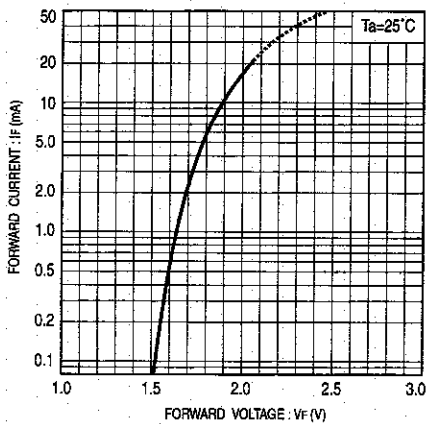


Figure 1

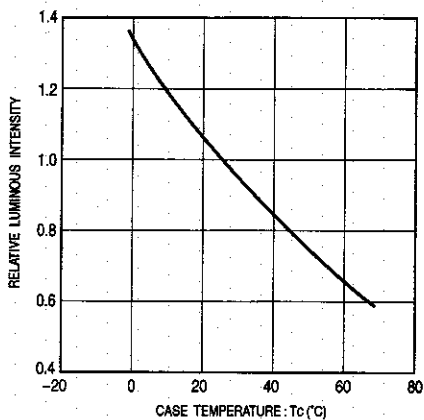


Figure 2

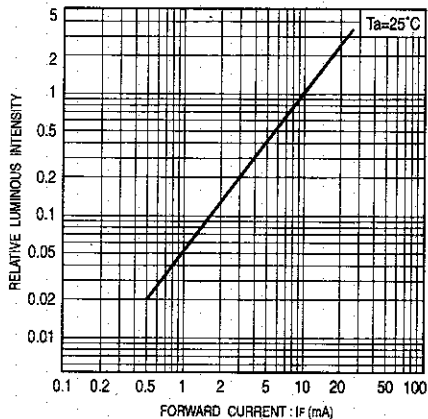


Figure 3

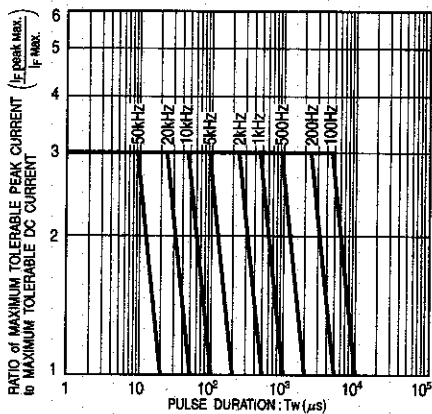


Figure 4

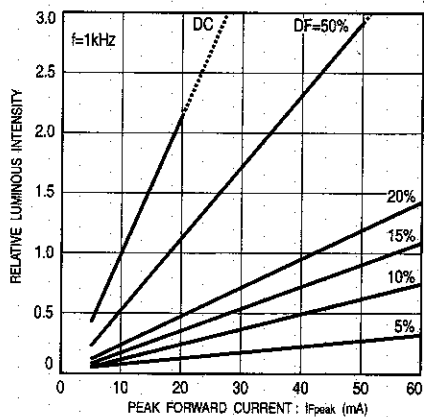


Figure 5

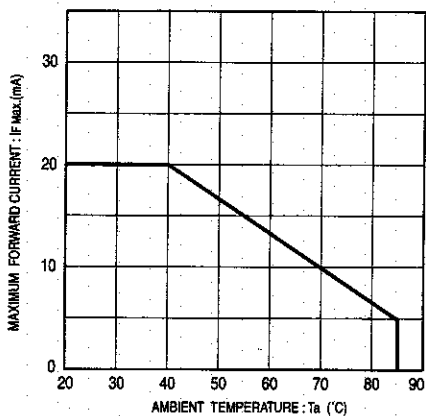


Figure 6

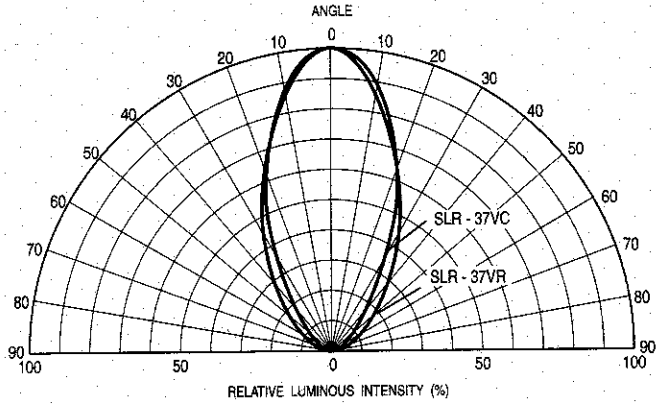


Figure 7 Directional pattern (red)

Electrical characteristic curves 2 (Orange)

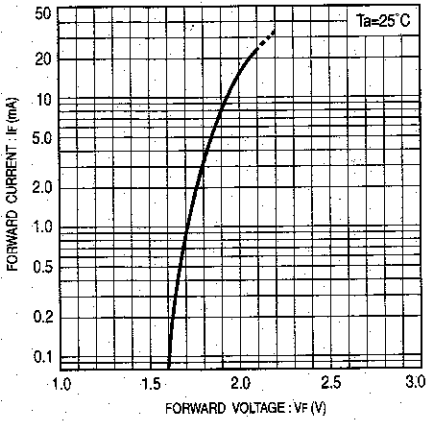


Figure 8

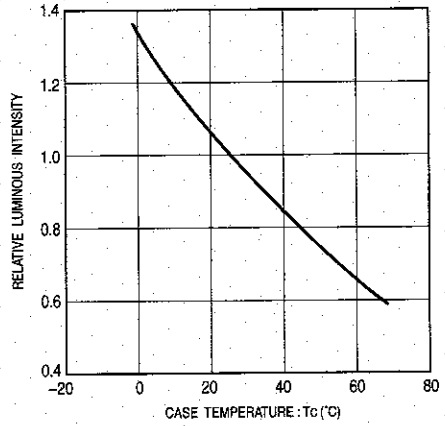


Figure 9

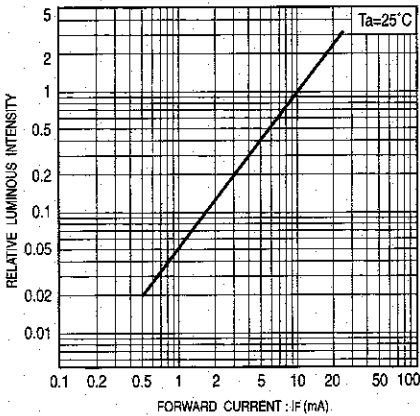


Figure 10

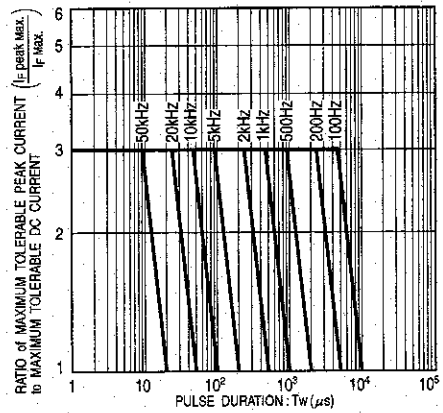
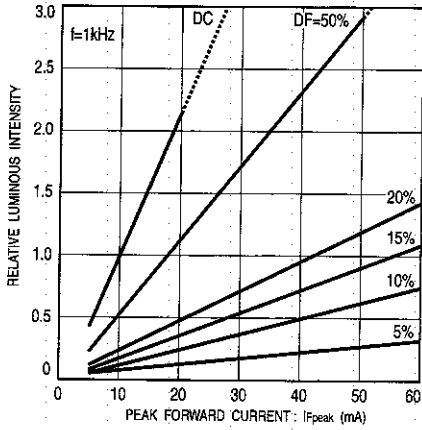
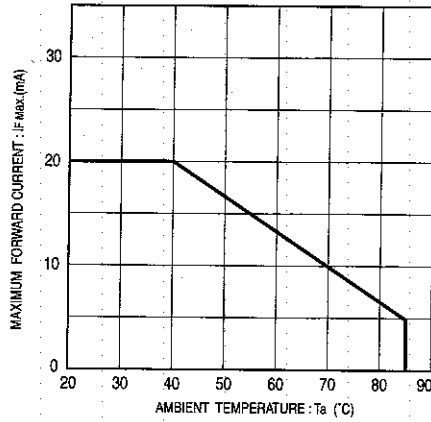


Figure 11

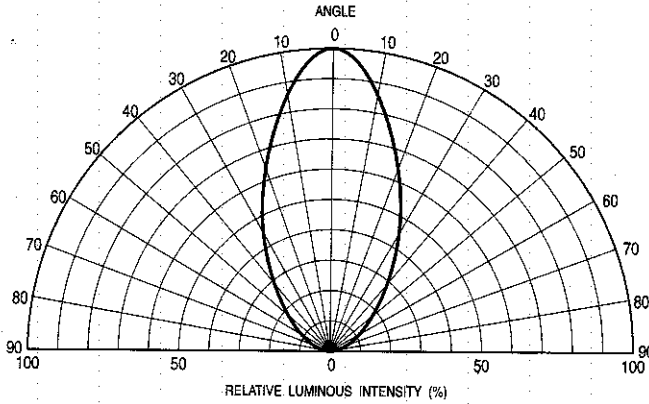
Direct-mount LED lamps, high brightness, reflector type **SLR-37 series**



**Figure 12**

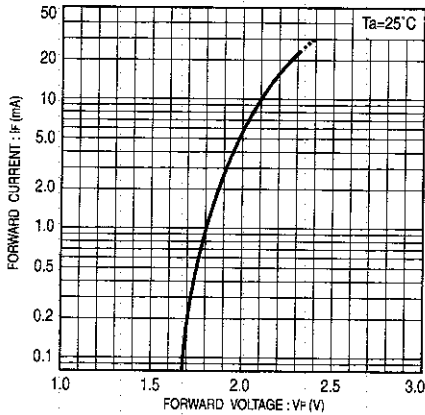


**Figure 13**

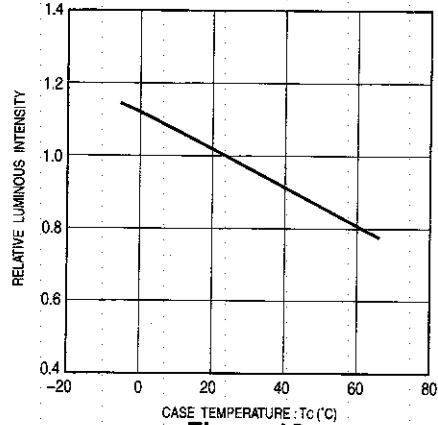


**Figure 14 Directional pattern (orange)**

**Electrical characteristic curves 3 (Yellow)**



**Figure 15**



**Figure 16**

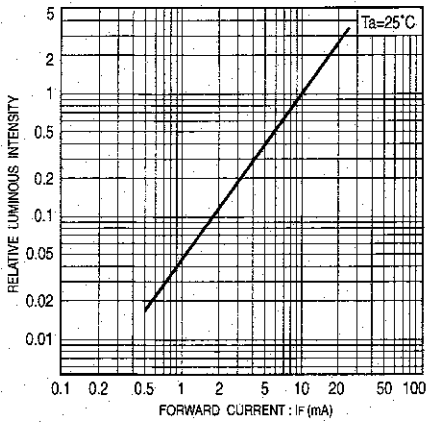


Figure 17

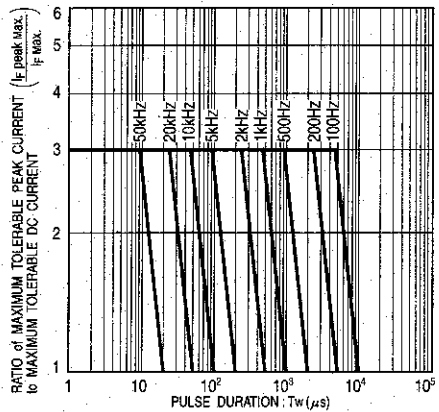


Figure 18

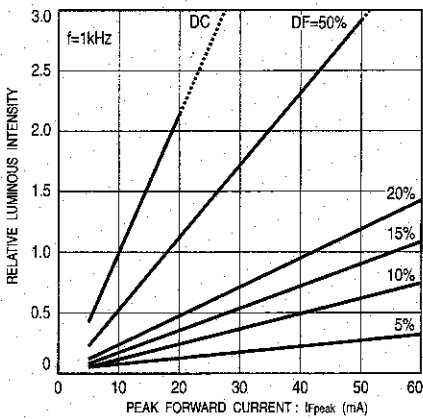


Figure 19

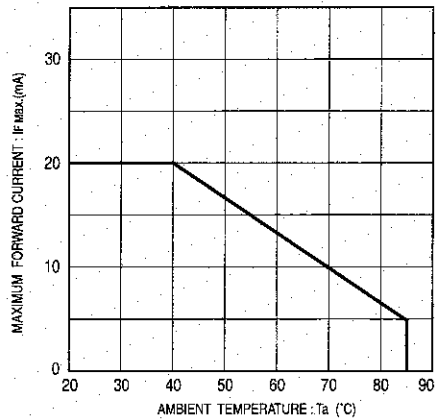


Figure 20

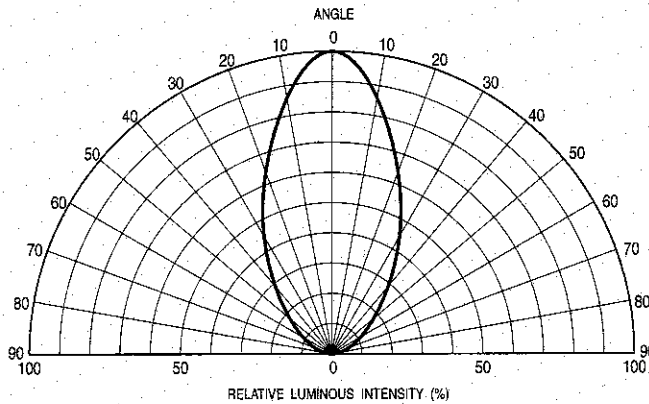
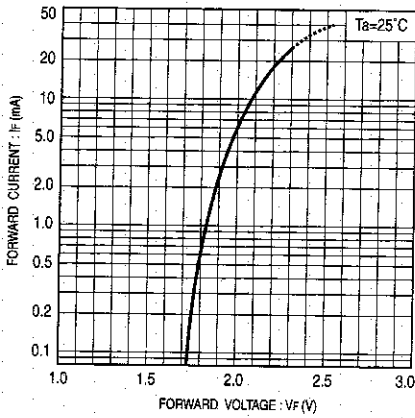
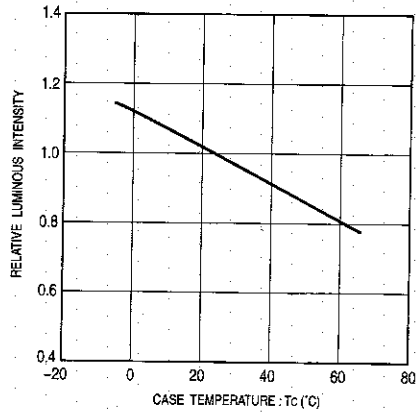


Figure 21 Directional pattern (yellow)

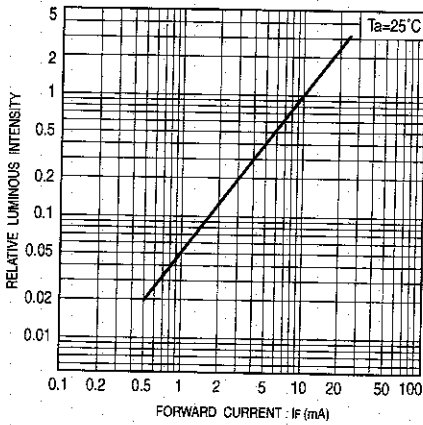
**Electrical characteristic curves 4 (Green)**



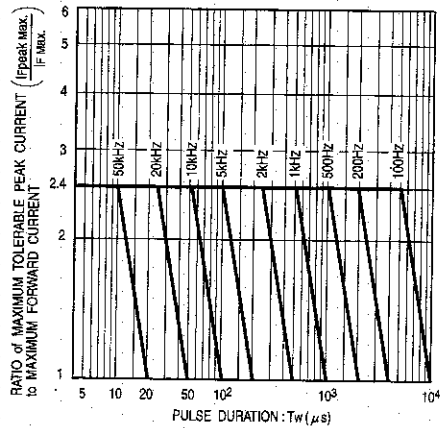
**Figure 22**



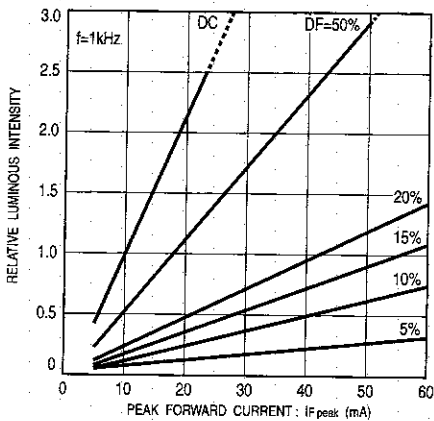
**Figure 23**



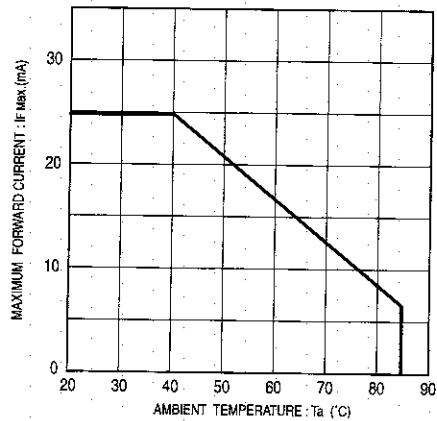
**Figure 24**



**Figure 25**



**Figure 26**



**Figure 27**

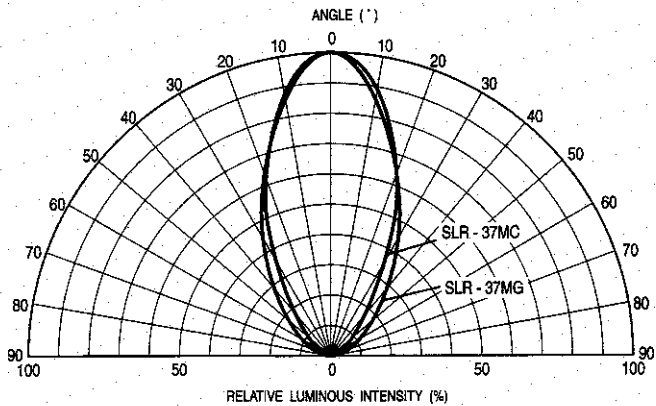


Figure 28 Directional pattern (green)