SLR-37 series

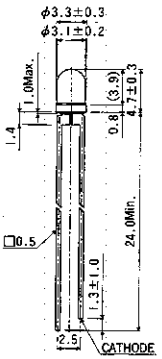
LED, reflecting, high brightness, 3.0 mm

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

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

Dimensions (Units : mm)



Selection guide

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

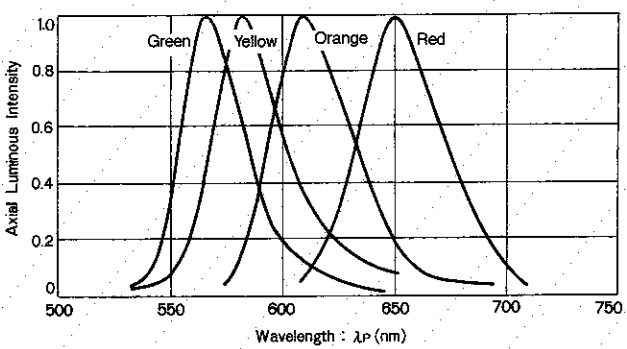
Absolute maximum ratings (T_a = 25°C)

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				°C	
Storage temperature	T_{stg}	−30 ~ +100				°C	

Electro-optical characteristics (T_a = 25°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 mA
Reverse current	I_R		10		10		10		10	μA	V_R = 3 V
Peak wavelength	λ_p	650		610		585		563		nm	I_F = 10 mA
Spectral half-width	$\Delta\lambda$	40		40		40		40		nm	I_F = 10 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	λ_P	Min	Typical	Max	Unit	Conditions
SLR-37VR	Red	650	3.6	10		mcd	I_F = 10 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)

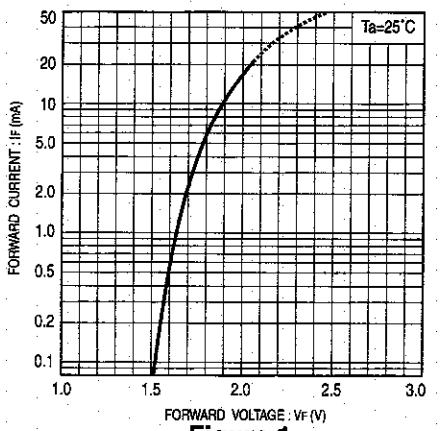


Figure 1

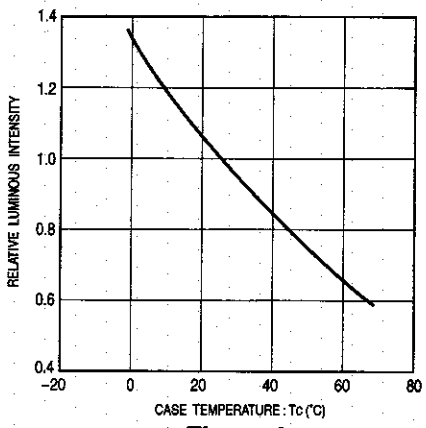


Figure 2

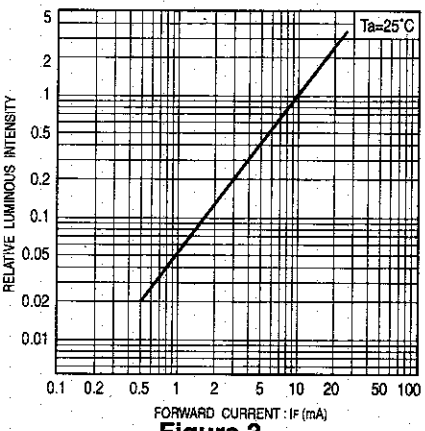


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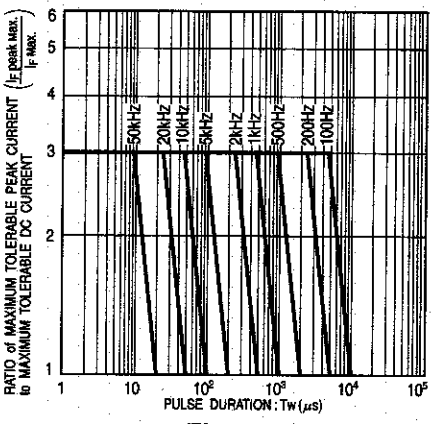


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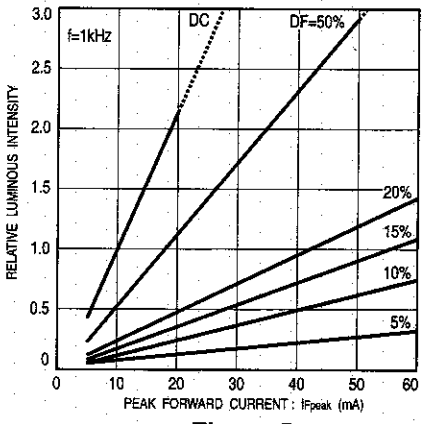


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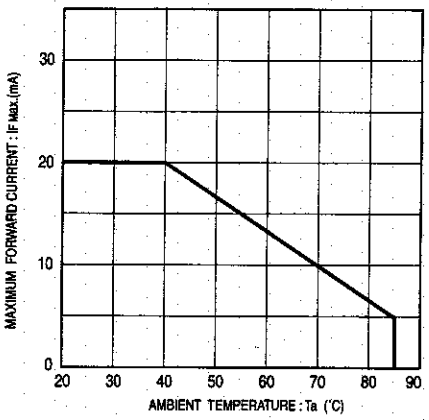


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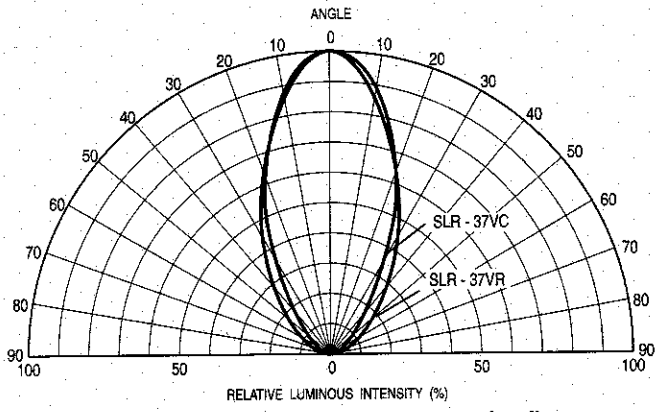


Figure 7 Directional pattern (red)

Electrical characteristic curves 2 (Orange)

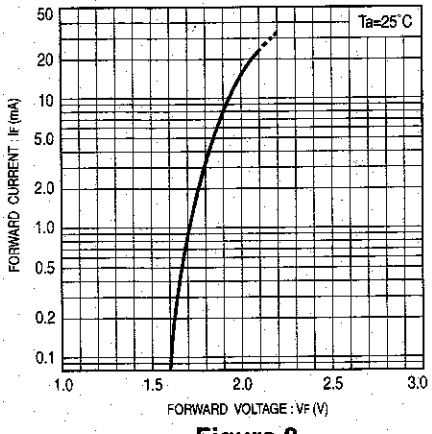


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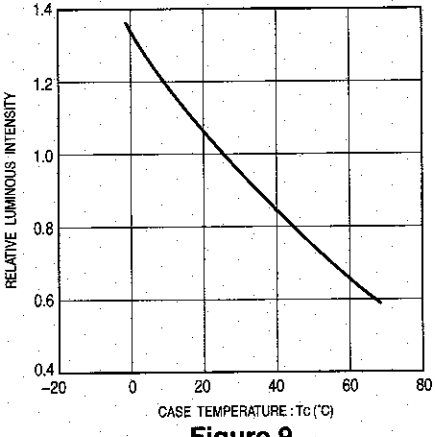


Figure 9

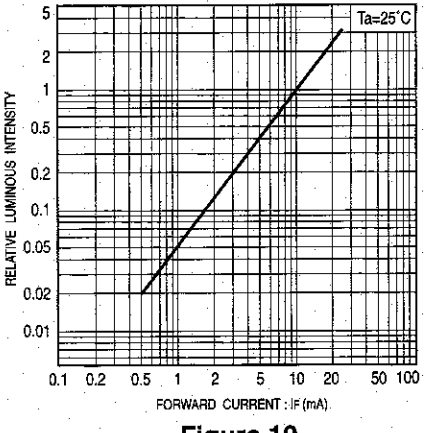


Figure 10

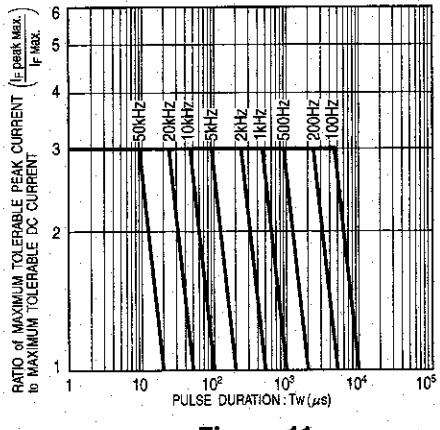


Figure 11

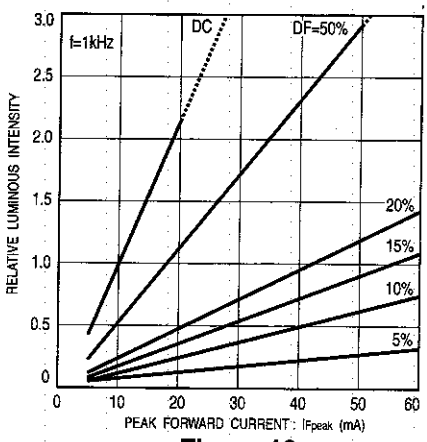


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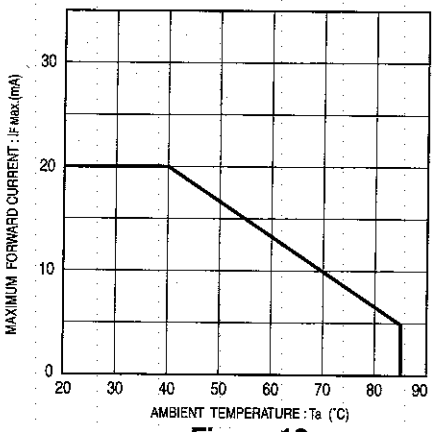


Figure 13

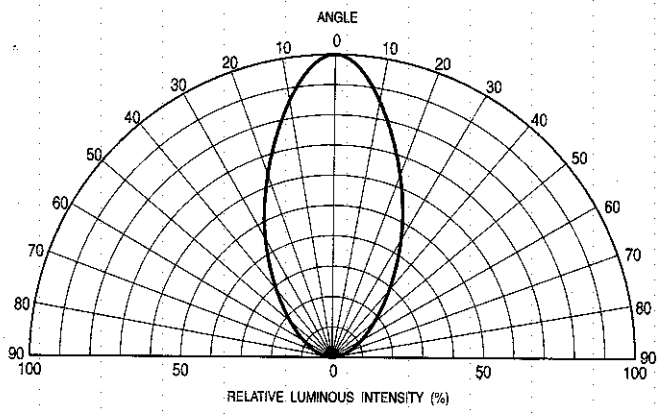


Figure 14 Directional pattern (orange)

Electrical characteristic curves 3 (Yellow)

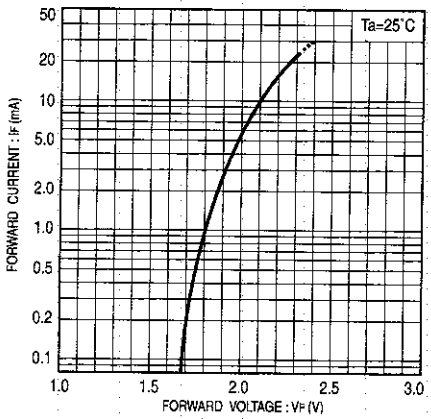


Figure 15

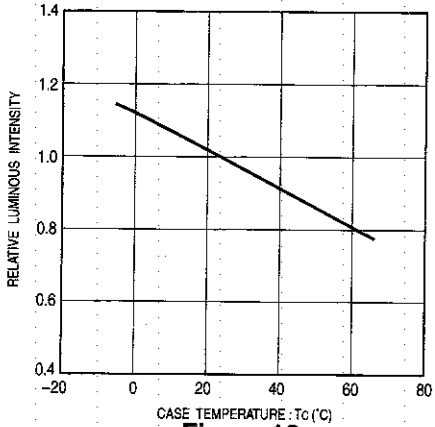


Figure 16

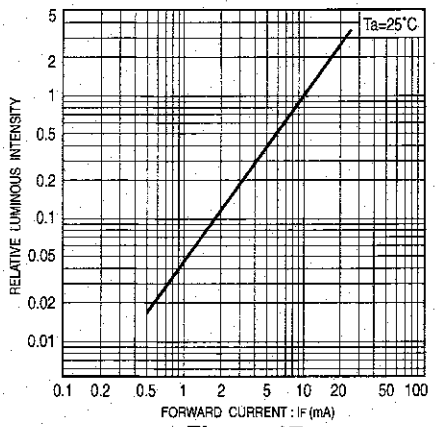


Figure 17

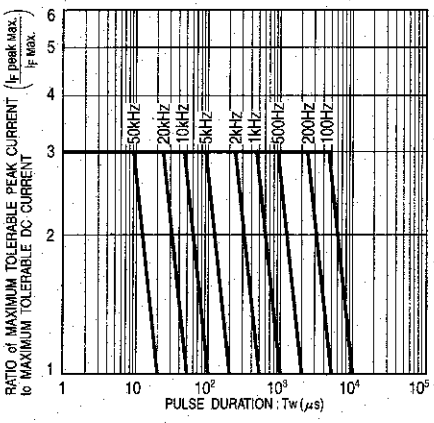


Figure 18

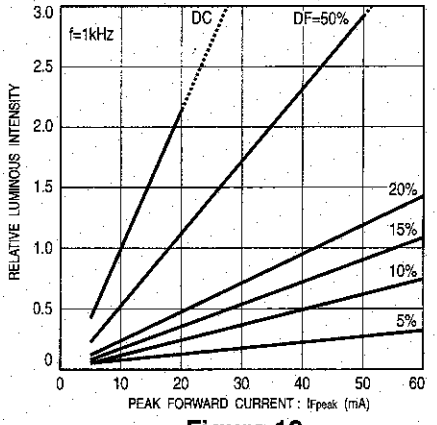


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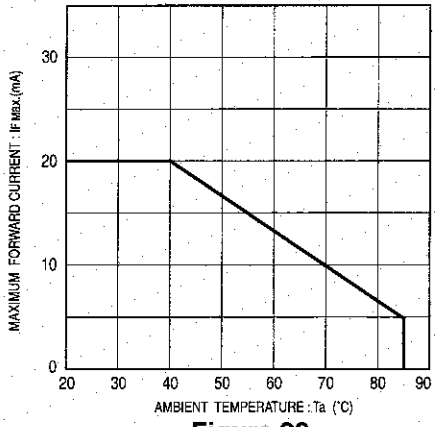


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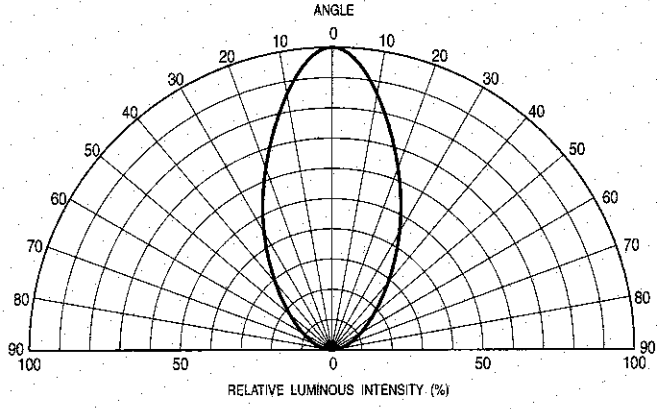


Figure 21 Directional pattern (yellow)

Electrical characteristic curves 4 (Green)

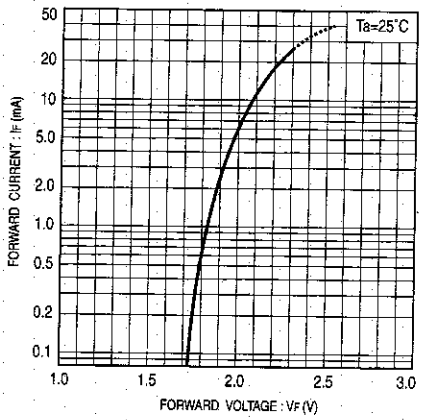


Figure 22

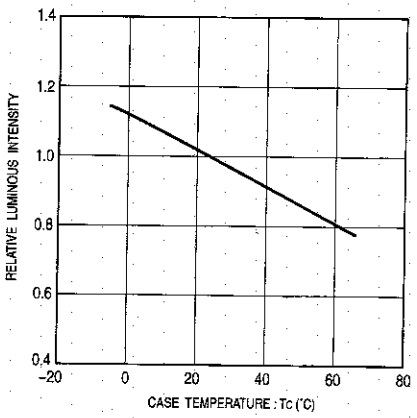


Figure 23

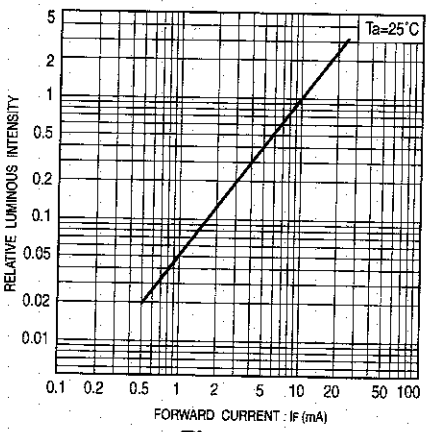


Figure 24

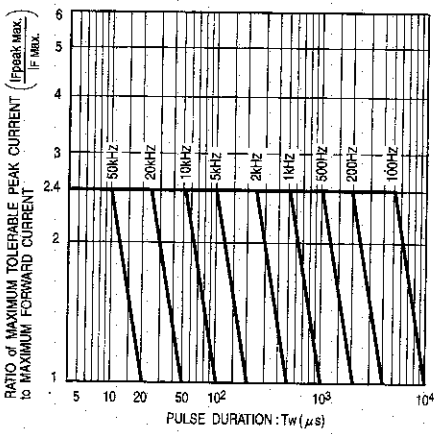


Figure 25

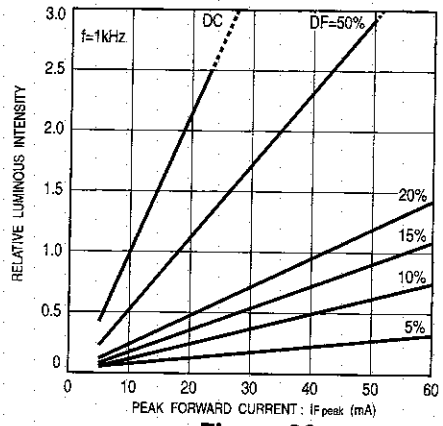


Figure 26

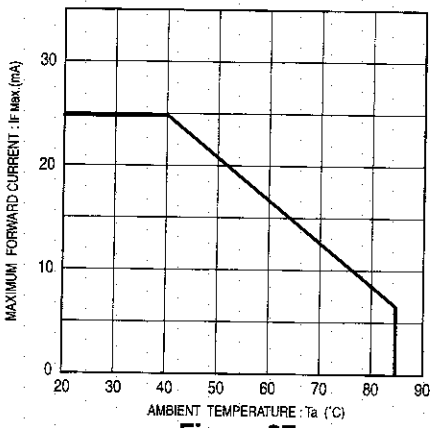


Figure 27

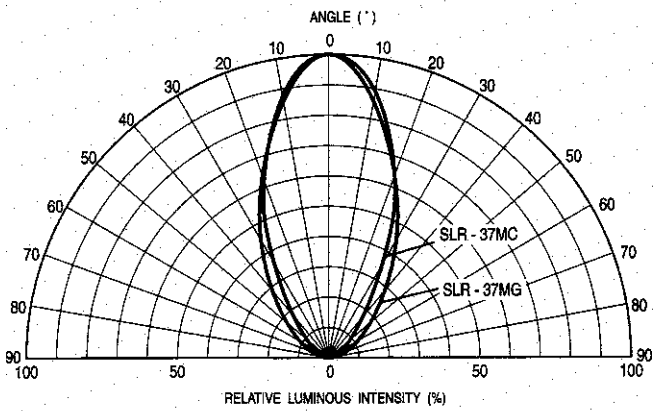


Figure 28 Directional pattern (green)

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