# High luminance, small LEDs (φ3, φ3.1 mm)

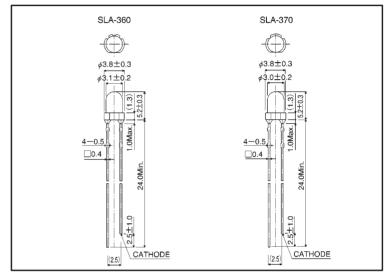
# **SLA-360 / SLA-370 Series**

The SLA-360 and SLA-370 series are high luminance LEDs which give you a choice of narrow to wide viewing angles. Two red types and one green type are available in two packages for a total of six different types, and they are suitable for use in a wide variety of applications.

#### Features

- 1) Very bright.
- Ideal for outdoor and semi-outdoor applications.
- 3) High reliability.

# External dimensions (Units: mm)



#### Selection guide

Chip	Single-hetero GaAlAs(red)	Double-hetero GaAlAs(red)	GaP(green)
Medium viewing type	SLA-370LT	SLA-370JT	SLA-370MT
Wide viewing type	SLA-360LT	SLA-360JT	SLA-360MT

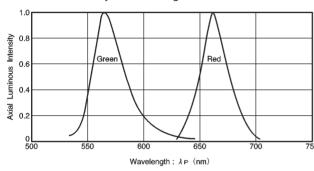
#### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Green	Unit	
		SLR-360LT / JT SLR-370LT / JT	SLR-360MT SLA-370MT		
Power dissipation	P□	100	75	mW	
Forward current	lF	50	25	mA	
Peak forward current	IFP	75	60	mA	
Reverse voltage	VR	4	4	٧	
Operating temperature	Topr	<b>−25</b> ~	C		
Storage temperature	Tstg	<b>−30</b> ^	C		
Soldering temperature	_	260°C 5 secor	_		

#### • Electrical and optical characteristics (Ta = 25°C)

Parameter		Symbol	Conditions	Red		Green			Unit	
				Min.	Тур.	Max.	Min.	Тур.	Max.	Offic
Forward voltage		VF	I=20mA	_	1.75	2.5	_	2.3	3.0	V
Reverse current		IR	V <sub>R</sub> =4V	_	_	100	_	_	10	μΑ
Peak wavelength		λp	I=20mA	_	660	_	_	563	_	nm
Spectral line half width		Δλ	I=20mA	_	25	_	-	40	_	nm
Viewing angle	SLA-360	<b>2</b> θ 1/2	_	_	40			40	_	deg
	SLA-370				25			25		

## •Luminous intensity vs. wavelength



# •Luminous intensity

Color	λp	Туре	Min.	Тур.	Мах.	Unit
Red 65		SLA-360JT 90		220	_	mcd
	650	SLA-360LT 20 47 -		_	mcd	
	650	SLA-370JT	200	470	_	mcd
		SLA-370LT	42	100	_	mcd
Green 5	563	SLA-360MT	30	68	_	mcd
	503	SLA-370MT	42	100	_	mcd

Note: Measured at IF = 10 mA

Fig.1

## Directional pattern

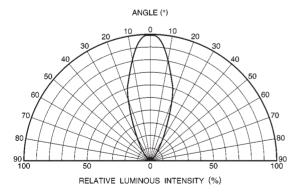


Fig. 2 SLA-360 Directional pattern

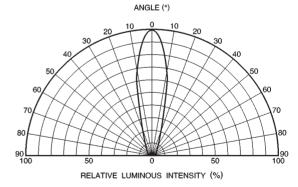


Fig. 3 SLA-370 Directional pattern

#### Electrical characteristic curves 1 (red)

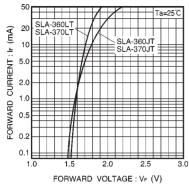


Fig. 4 Forward current vs. forward voltage

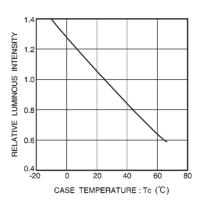


Fig. 5 Luminous intensity vs. case temperature

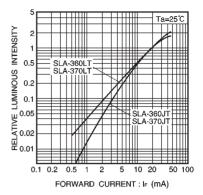


Fig. 6 Luminous intensity vs. forward current

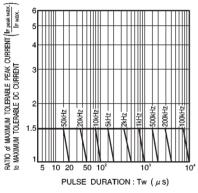


Fig. 7 Maximum tolerable peak current vs. pulse duration

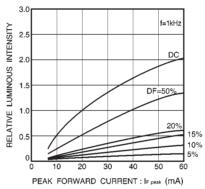


Fig. 8 Luminous intensity vs. peak forward current

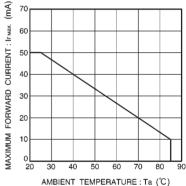


Fig. 9 Maximum forward current vs. ambient temperature

#### Electrical characteristic curves 2 (green)

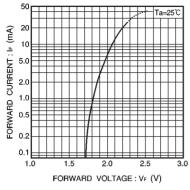


Fig. 10 Forward current vs. forward voltage

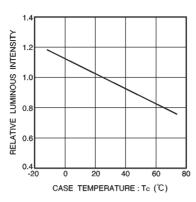


Fig. 11 Luminous intensity vs. case temperature

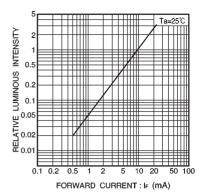


Fig. 12 Luminous intensity vs. forward current

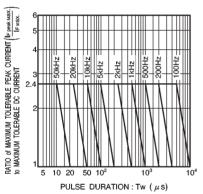


Fig. 13 Maximum tolerable peak current vs. pulse duration

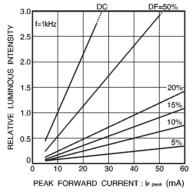


Fig. 14 Luminous intensity vs. peak forward current

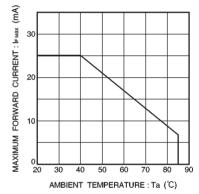


Fig. 15 Maximum forward current vs. ambient temperature