



Y.LIN ELECTRONICS CO.,LTD.

Data Sheet

Customer: _____
Part No: M5JRGB9UWOA
Sample No: _____
Description: 5mm Flat Red/Green/Blue LED
Item No: _____

Customer			
Check	Inspection	Approval	Date

Y.LIN			
Drawn	Check	Approval	Date
			2015-9-4

Mainland address: Jinhe The Third Industrial Zone, Zhangmutou Town, Dongguan, Guangdong, China

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M5JRGB9UWOA

Features:

- . Choice of various viewing angles
- . Available on tape and reel.
- . Reliable and robust
- . Pb free
- .The product itself will remain within RoHS compliant version.



Technical Data Sheet

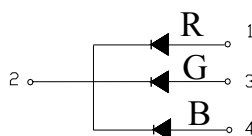
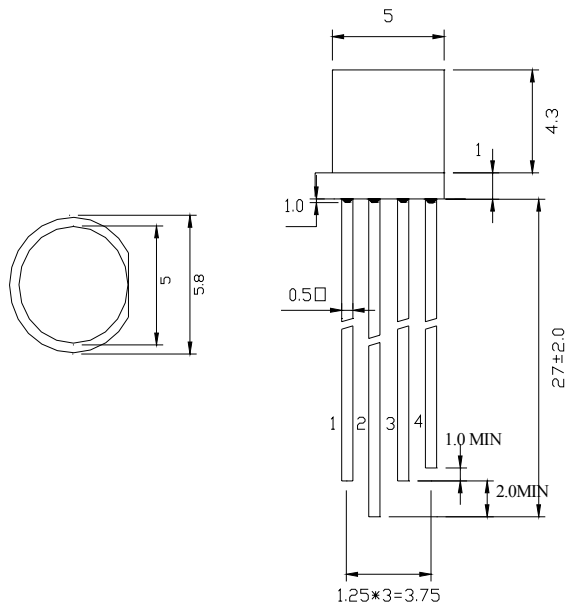
This product is generally used as indicator and luminary for electronic equipment such as household appliance, communication equipment, and dashboard

Applications

- TV set
- Monitor
- Telephone
- Computer



Package Dimensions:



NOTES

- 1.All dimensions are in millimeters .
- 2.Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



M5JRGB9UWOA

Selection Guide

Part No.	Dice	Lens Type	Luminous intensity(mcd) @ 20mA			Viewing Angle
			Min	Typ	Max	201/2
M5JRGB9UWOA	(R)AlGaInP	White Diffused	150	230	--	130
	(G)InGaN		400	600	--	
	(B)InGaN		100	200	--	

Note:

- 1.1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 2.the above luminous intensity measurement allowance tolerance $\pm 15\%$

Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.(R/G/B)	Typ.(R/G/B)	Max.(R/G/B)	Units	test conditions
Forward Voltage	VF	1.8/2.8/2.8	2.0/3.2/3.2	2.4/3.6/3.6	V	IF=20mA
Reverse Current	IR	--	--	10	uA	VR = 5V
Dominate Wavelength	λ_d	620/515/463	--	630/530/475	nm	IF=20mA

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Units
Power Dissipation	Pd(R/G/B)	60/90/90	mW
DC Forward Current	IF	25	mA
Peak Forward Current [1]	IFP	60	mA
Reverse Voltage	VR	5	V
Operating Temperature	Topr	-20~+80	°C
Storage Temperature	Tstg	-40~+100	°C
Lead Soldering Temperature [1.6mm(.063") From Body]		260°C for 5 seconds	

Note:

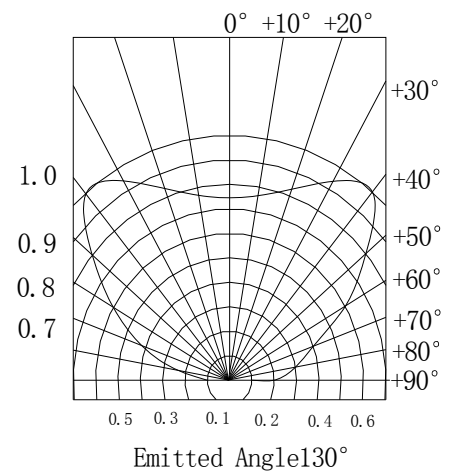
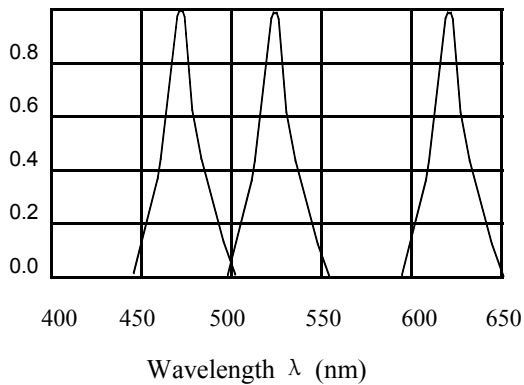
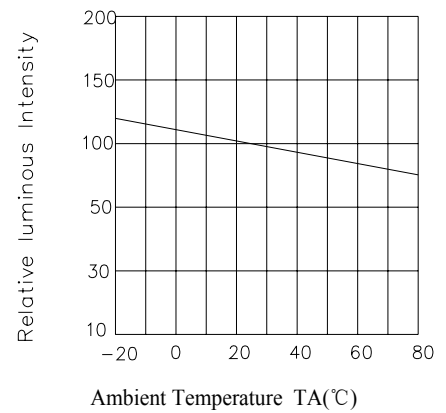
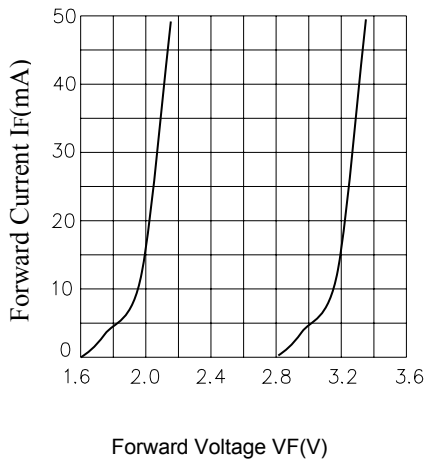
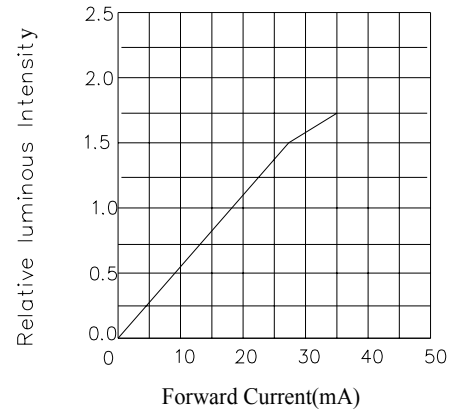
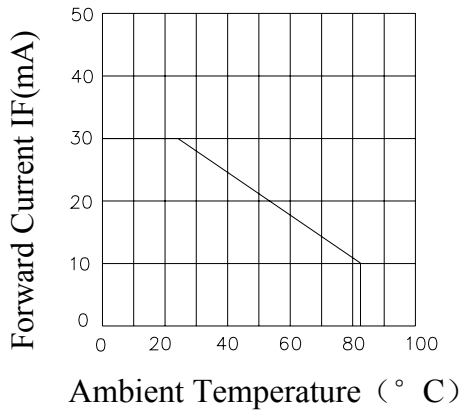
1. 1/10 Dut cycle,0.1ms pulse width.
2. The above forward voltage measure ment allowance tolerance $\pm 0.1V$.



M5JRGB9UWOA

Typical optical characteristics curves

Ambient Temperature VS. Forward Current





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Reliability Test

Classification	Test Item	Test Condition	Reference Standard
Endurance Test	Operation Life	Ta=Under Room Temperature As Per Data Sheet Maximum Rating *Test Time=1000HRS(-24HRS,+72HRS)	MIL-STD-750D:1026(1995) MIL-STD-883D:1005(1991) JIS C 7021:B-1(1982)
	High Temperature High Humidity Storage	Ta=65±5°C RH=90~95% Test Time=240HRS± 2HRS	MIL-STD-202F:103(1980) JIS C 7021:B-11(1982)
	High Temperature High Humidity Reverse BIAS	Ta=65±5°C RH=90~95% Test Time=500HRS(-24HRS,+48HRS)	JIS C 7021:B-11(1982)
	High Temperature Storage	Ta=105±5°C *Test Time=1000HRS(-24HRS,+72HRS)	MIL-STD-883D:1008(1991) JIS C 7021:B-10(1982)
	Low Temperature Storage	Ta=55±5°C *Test Time=1000HRS(-24HRS,+72HRS)	JIS C 7021:B-12(1982)
	Environmental Test	Temperature Cycling	105°C ~ 25°C ~ -55°C ~ 25°C 30mins 5mins 30mins 5mins 10Cycles
Thermal Shock		105°C±5°C ~ -55°C±5°C 10mins 10mins 10Cycles	MIL-STD-202F:107D(1980) MIL-STD-750D:1051(1995) MIL-STD-883D:1010(1991)
Solder Resistance		T.sol=260±5°C Dwell Time=10±1secs	MIL-STD-202F:210A(1980) MIL-STD-750D:2031(1995) JIS C 7021:A-1(1982)
Solderability		T.sol=230±5°C Dwell Time=5±1secs	MIL-STD-202F:208D(1980) MIL-STD-750D:2026(1995) MIL-STD-883D:2003(1991) JIS C 7021:A-2(1982)

The appearance and specifications of the product may be modified for improvement, without prior notice

