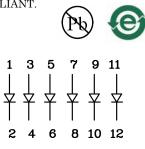
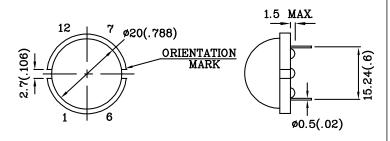


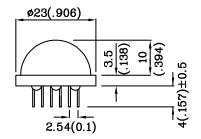
20mm BIG LAMP

## **Features**

- 12 PINS.
- HIGH LUMINOUS INTENSITY.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- EXCELLENT ON/OFF CONTRAST.
- EASY MOUNTING ON P.C. BOARD OR SOCKETS.
- SOLID STATE RELIABILITY.
- Rohs Compliant.







# Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- $3. \ {\rm Specifications}$  are subject to change without notice.

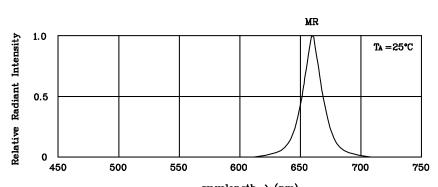
Absolute Maximum Ratin (TA=25°C)	MR (GaAlAs)	Unit		
Reverse Voltage	VR	5	V	
Forward Current	IF	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	155	mA	
Power Dissipation	Рт	75	mW	
Operating Temperature	TA	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3~5 Seconds			

Operating Characteristics (TA=25°C)	MR (GaAlAs)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	1.85	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λΡ	660	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λ D	640	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
FMR20D6A	Red	GaAlAs	Red Diffused	110	397	660	120°
Published Date :	MAR 19.2008	Drawir	ng No :SDSA2827	V5	Check	ted : Shin Chi	P.1/4

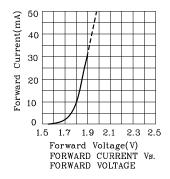


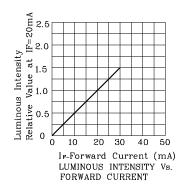
20mm BIG LAMP

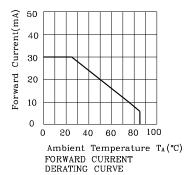


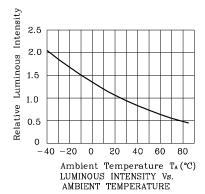
wavelength  $\lambda$  (nm) RELATIVE INTENSITY Vs. WAVELENGTH

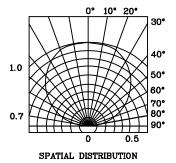
# ❖ MR







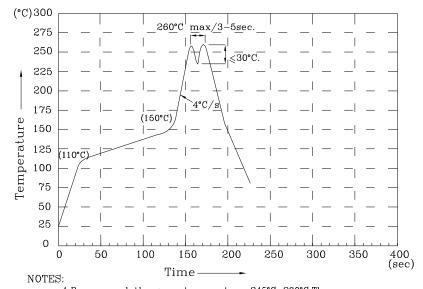






20mm BIG LAMP

Wave Soldering Profile For Lead-free Through-hole LED.



1.Recommend the wave temperature 245°C $\sim$ 260°C.The maximum soldering temperature should be less than 260°C.

2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.

3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).

4.No more than once.

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

Published Date : MAR 19,2008 Drawing No :SDSA2827 V5 Checked : Shin Chi P.3/4



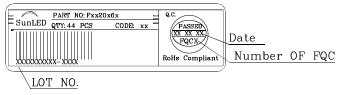


20mm BIG LAMP

# PACKING & LABEL SPECIFICATIONS FMR20D6A 44 PCS / TUBE OUTSIDE LABEL

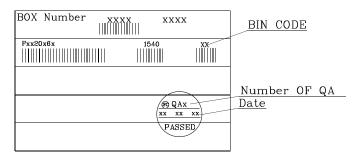
1540 PCS/BOX

Inside LABEL Paste On The IC-tube



35 TUBE/BOX

Outside LABEL Paste On The Box



Published Date : MAR 19,2008 Drawing No :SDSA2827 V5 Checked : Shin Chi P.4/4