SunLED
www.SunLED.com

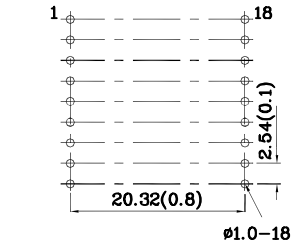
Part Number: AMR30C

30.48mm(1.2 ") 16 SEGMENT SINGLE DIGIT
ALPHANUMERIC NUMERIC DISPLAY

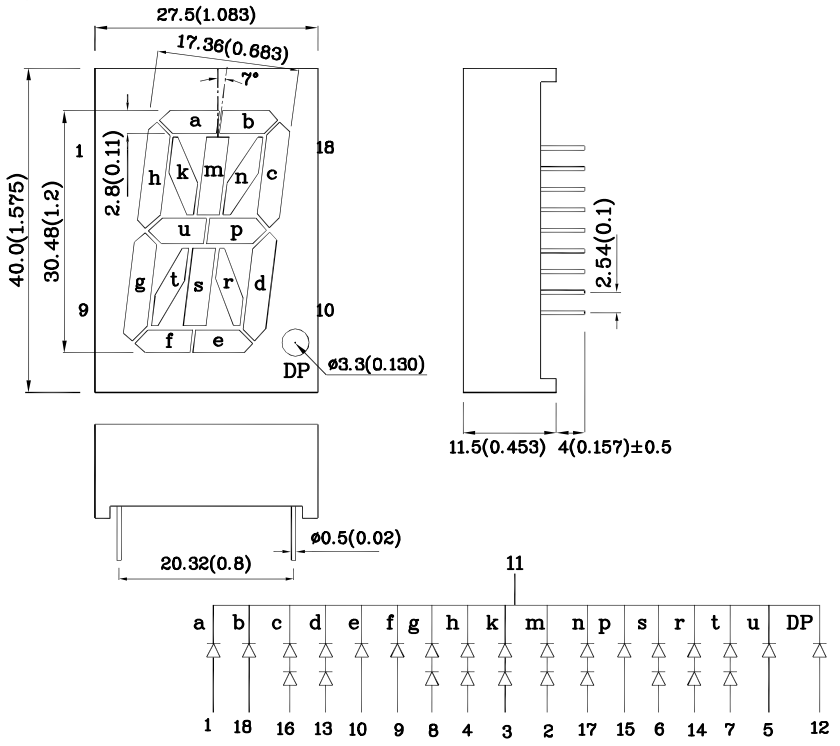
Features

- Low power consumption
- Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- Optional black face provides superior color contrast
- RoHS Compliant

RECOMMENDED PCB LAYOUT



Package Schematics

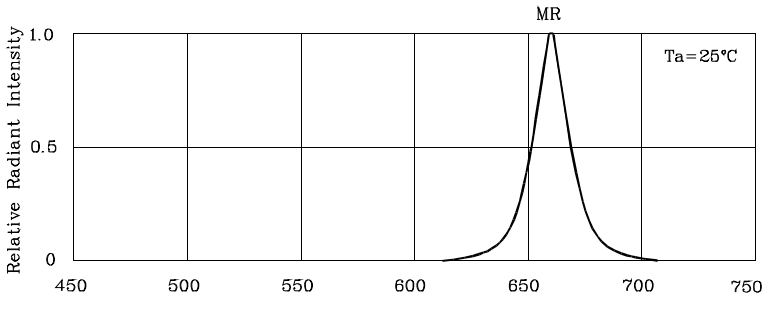


Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)			**MR (GaAlAs)**	**Unit**
Reverse Voltage	c,d,g,h,k,m,n, s,r,t	VR	5	V
	a,b,e,f,p,u and DP		5	
DC Forward Current	c,d,g,h,k,m,n, s,r,t	IF	30	mA
	a,b,e,f,p,u and DP			
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	c,d,g,h,k,m,n, s,r,t	iFS	155	mA
	a,b,e,f,p,u and DP			
Power Dissipation	c,d,g,h,k,m,n, s,r,t	PD	150	mW
	a,b,e,f,p,u and DP		75	
Operating Temperature		TA	-40 ~ +85	°C
Storage Temperature		Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]		260°C For 3~5 Seconds		

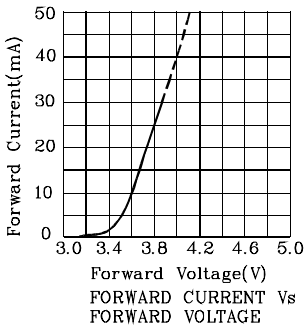
Operating Characteristics (TA=25°C)			**MR (GaAlAs)**	**Unit**
Forward Voltage (Typ.) (IF=10mA)	c,d,g,h,k,m,n ,s,r,t	VF	3.6	V
	a,b,e,f,p,u and DP		1.8	
Forward Voltage (Max.) (IF=10mA)	c,d,g,h,k,m,n ,s,r,t	VF	5	V
	a,b,e,f,p,u and DP		2.5	
Reverse Current (Max.) (VR=5V)	c,d,g,h,k,m,n ,s,r,t	IR	10	uA
	a,b,e,f,p,u and DP			
Wavelength of Peak Emission (Typ.) (IF=10mA)		λ P	660	nm
Wavelength of Dominant Emission (Typ.) (IF=10mA)		λ D	640	nm
Spectral Line Full Width At Half-Maximum (Typ.)(IF=10mA)		Δλ	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)		C	45	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity (I_F=10mA) ucd		Wavelength nm λP	Description
			min.	typ.		
AMR30C	Red	GaAlAs	14000	35990	660	Common Cathode, Rt. Hand Decimal.

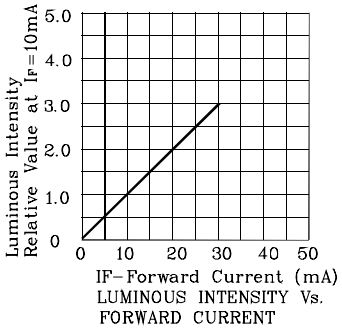


RELATIVE INTENSITY Vs. WAVELENGTH

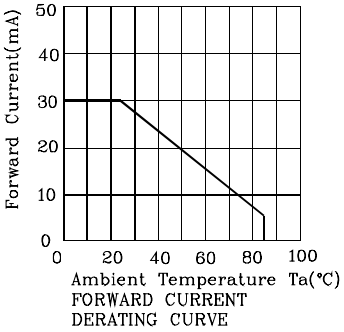
❖ MR



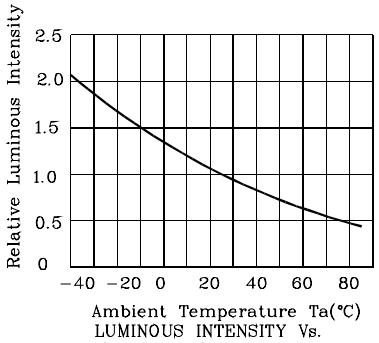
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

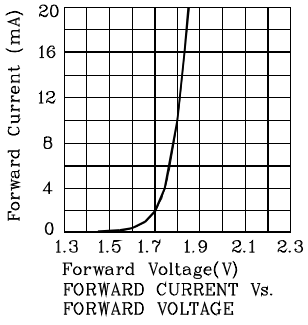


FORWARD CURRENT
DERATING CURVE

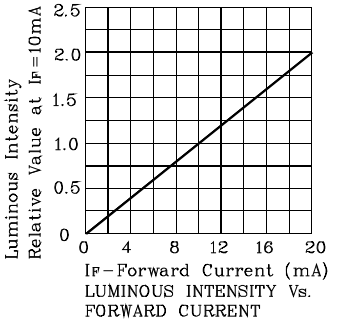


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

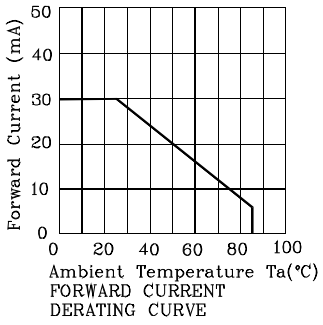
Note:the curves are on the segment c,d,g,h,k,m,n,s,r and t.



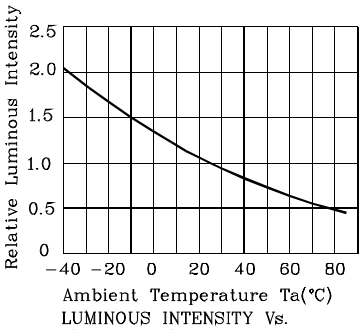
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



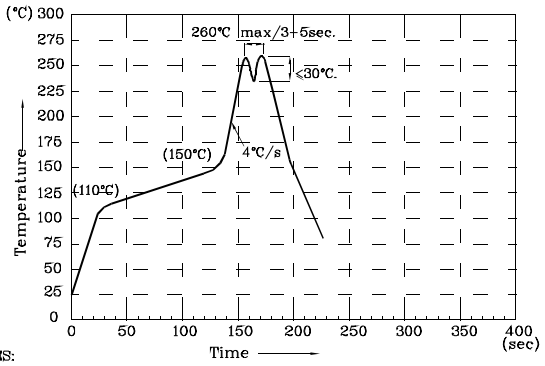
FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

Note:the curves are on the segment a,b,e,f,p,u and DP.

Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



NOTES:
1. Recommend the wave temperature 245°C~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°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C.
5. No more than once.

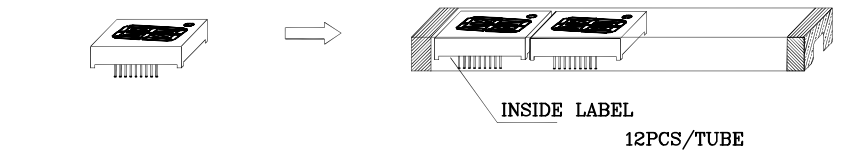
Remarks:

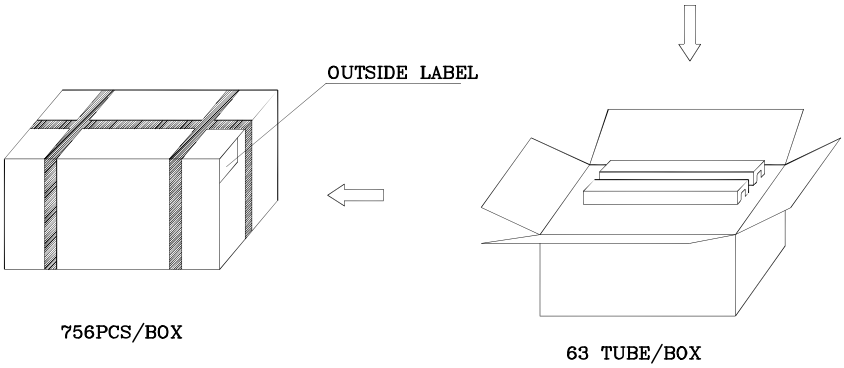
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

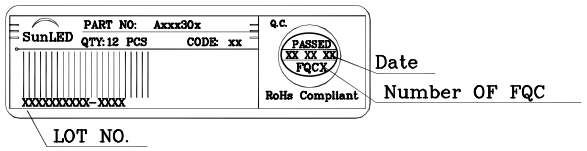
Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS





Inside Label On IC-tube



Outside Label On Box