Feature:

- Low power consumption
- Packed in tube
- AlInGaP technology for Red/Yellow/Yellow Green
- InGaN technology for Green/ Blue

Description:

These 1.2” 5x7 dot matrix displays are made with white got and grey surface.

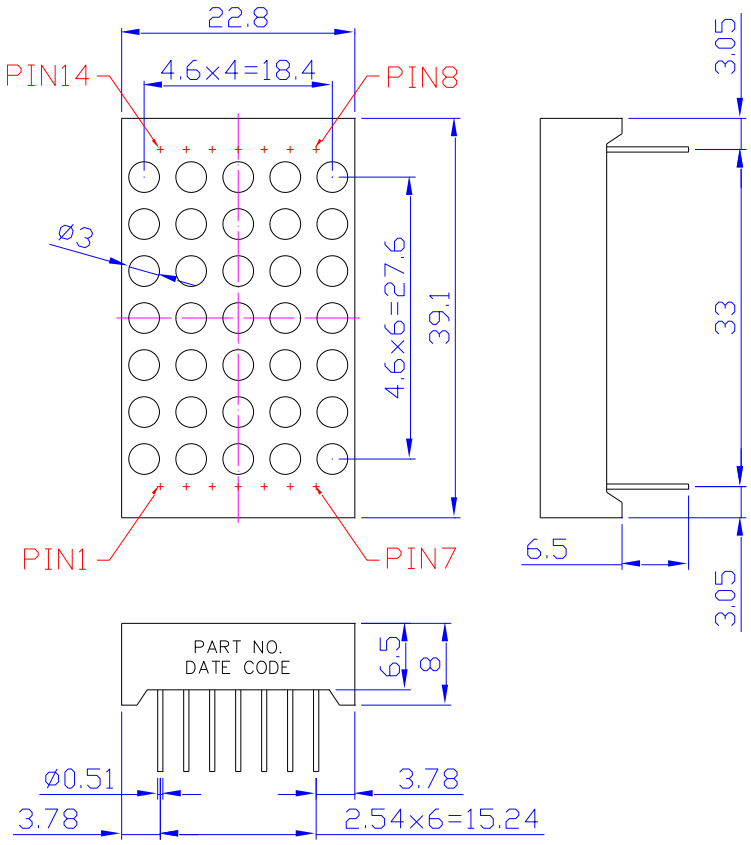
Application:

- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.25mm

Electrical / Optical Characteristic (T=25 °C)

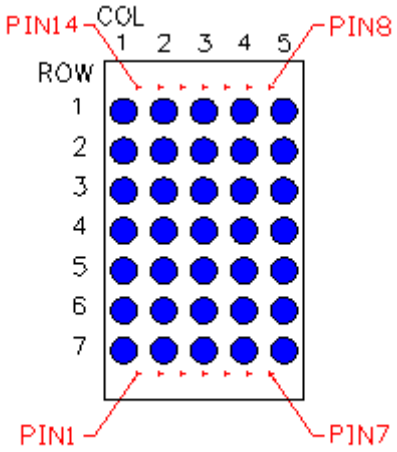
Product		Material	Color	I_F(mA)	V_F(V)	λ(nm)		I_V(mcd)
CC	CA				Typ.	λ_D	λ_P	Typ.
GMC12IB75	GMA12IB75	InGaN	Blue	20	3.0	460	470	160
GMC12IG75	GMA12IG75	InGaN	Green	20	3.0	460	470	200
GMC12R75	GMA12R75	AlInGaP	Red	20	2.0	624	632	60
GMC12Y75	GMA12Y75	AlInGaP	Yellow	20	2.0	589	591	35
GMC12AG75	GMA12AG75	AlInGaP	Yellow Green	20	2.0	573	575	25

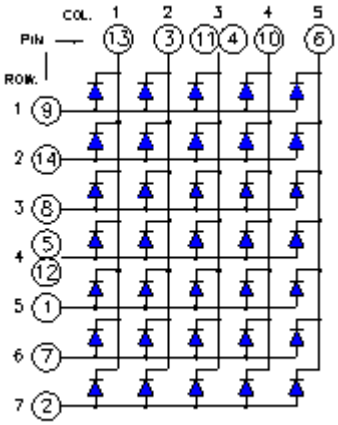
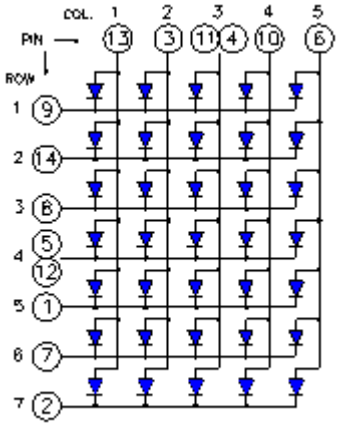
Absolute Maximum Rating

Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
InGaN (IB/IG)	120	30	100	5	-40 - 85	-40 - 100	260
AlInGaP (R/Y/AG)	70	30	90	5	-40 - 85	-40 - 100	260

*Duty 1/10 @ 1KHz
** IR Reflow for no more than 5 sec @ 260 °C

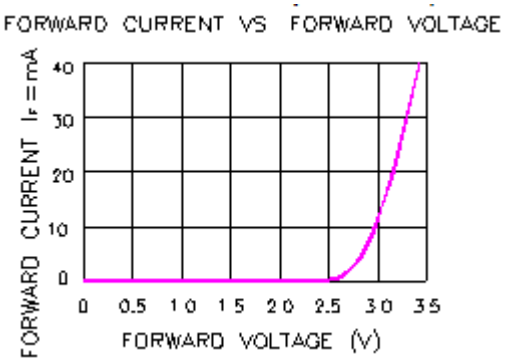
Pin Configuration

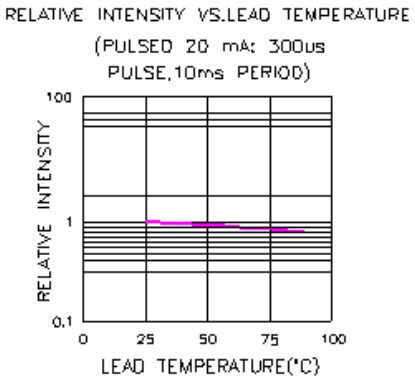


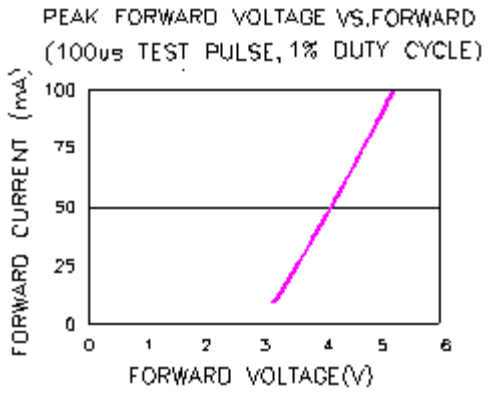
CC	CA
	

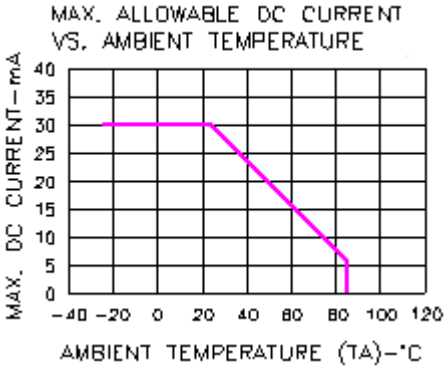
Characteristic Curves:

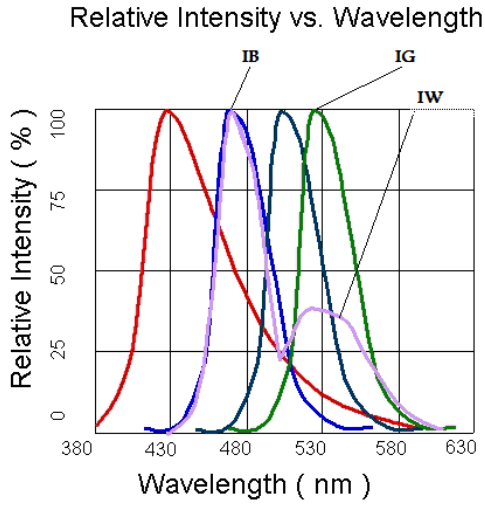
InGaN



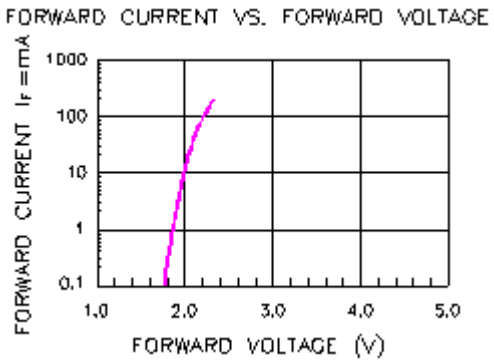


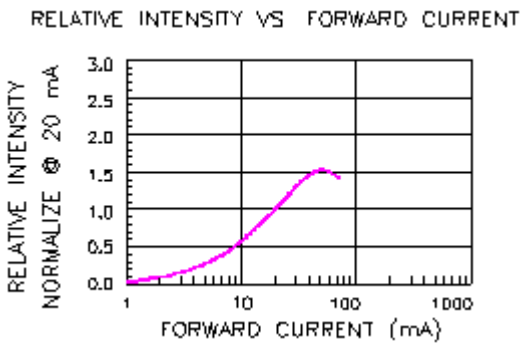


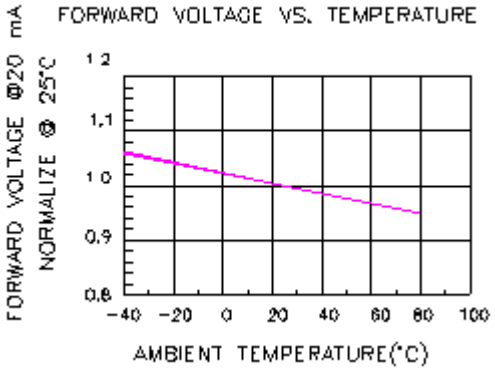


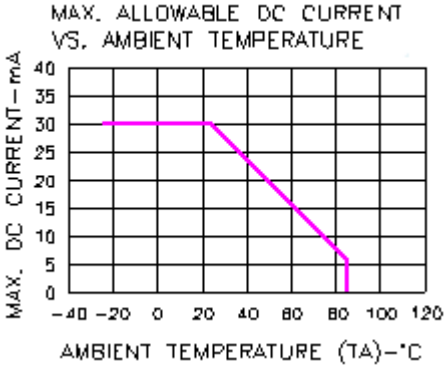


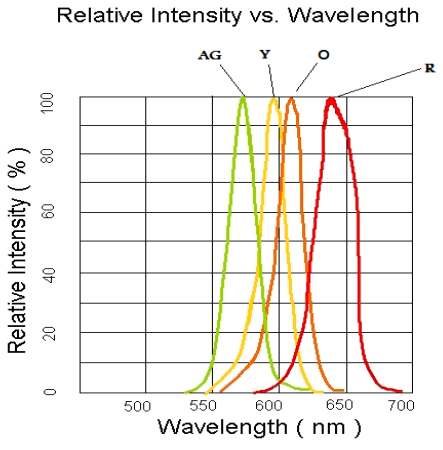
AlInGaP


FORWARD CURRENT VS. FORWARD VOLTAGE
FORWARD CURRENT IF =mA
1000
100
10
1
0.1
1.0
2.0
3.0
4.0
5.0
FORWARD VOLTAGE (V)

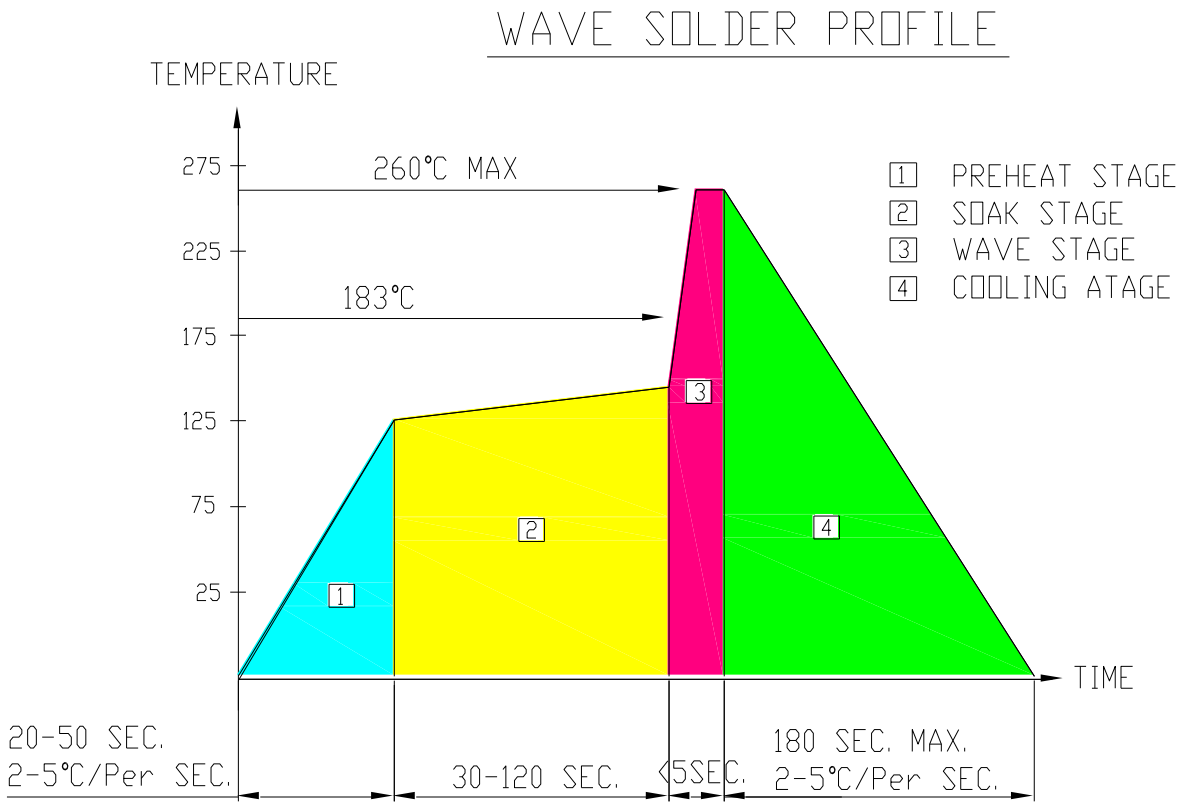

RELATIVE INTENSITY VS FORWARD CURRENT
RELATIVE INTENSITY NORMALIZE @ 20 mA
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
10
100
1000
FORWARD CURRENT (mA)


FORWARD VOLTAGE VS. TEMPERATURE
FORWARD VOLTAGE @20 mA NORMALIZE @ 25°C
1.2
1.1
1.0
0.9
0.8
-40 -20 0 20 40 60 80 100
AMBIENT TEMPERATURE(°C)


MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE
MAX. DC CURRENT—mA
40
35
30
25
20
15
10
5
0
-40 -20 0 20 40 60 80 100 120
AMBIENT TEMPERATURE (TA)—°C


Relative Intensity vs. Wavelength
AG
Y
O
R
Relative Intensity (%)
0
20
40
60
80
100
500
550
600
650
700
Wavelength (nm)

Solder Profile:



Ordering Information:

Product		Spec Range	Quantity per tube
CC	**CA**		
GMC12IB75	GMA12IB75	Iv=160mcd typ. @ I_F=20mA	TBD
GMC12IG75	GMA12IG75	Iv=200mcd typ. @ I_F=20mA	TBD
GMC12R75	GMA12R75	Iv=60mcd typ. @ I_F=20mA	TBD
GMC12Y75	GMA12Y75	Iv=35mcd typ. @ I_F=20mA	TBD
GMC12AG75	GMA12AG75	Iv=25mcd typ. @ I_F=20mA	TBD

Revision History:

Description:	Revision #	Revision Date
New Release of GMZ12XX75_series	V1.0	05/26/2011
Add Color Blue/ Green Spec.	V1.1	07/13/2011