

Feature:

- Large emitting dot with 0.15" diameter
- Low power consumption
- Packed in tube
- AllInGaP technology for Red/Yellow/ Yellow Green
- InGaN technology for Green/ Blue

Description:

These 1.5" 8x8 dot matrix displays are made with white dot and grey surface.

Application:

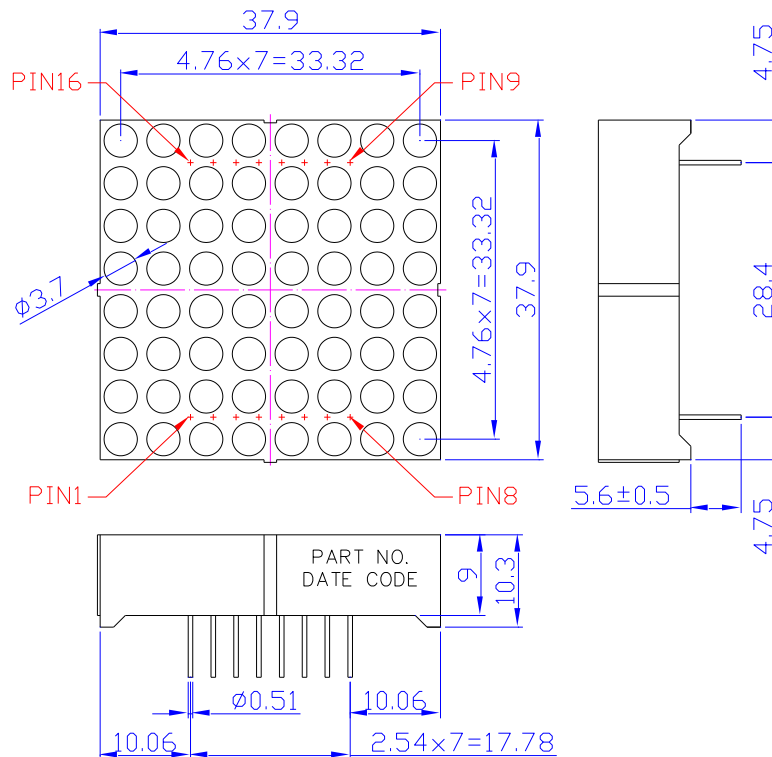
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

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.
GMC15IB88	GMA15IB88	InGaN	Blue	20	3.0	460	470	160
GMC15IG88	GMA15IG88	InGaN	Green	20	3.0	460	470	200
GMC15R88	GMA15R88	AllnGaP	Red	20	2.0	624	632	60
GMC15Y88	GMA15Y88	AllnGaP	Yellow	20	2.0	590	593	35
GMC15AG88	GMA15AG88	AllnGaP	Yellow Green	20	2.0	573	575	25

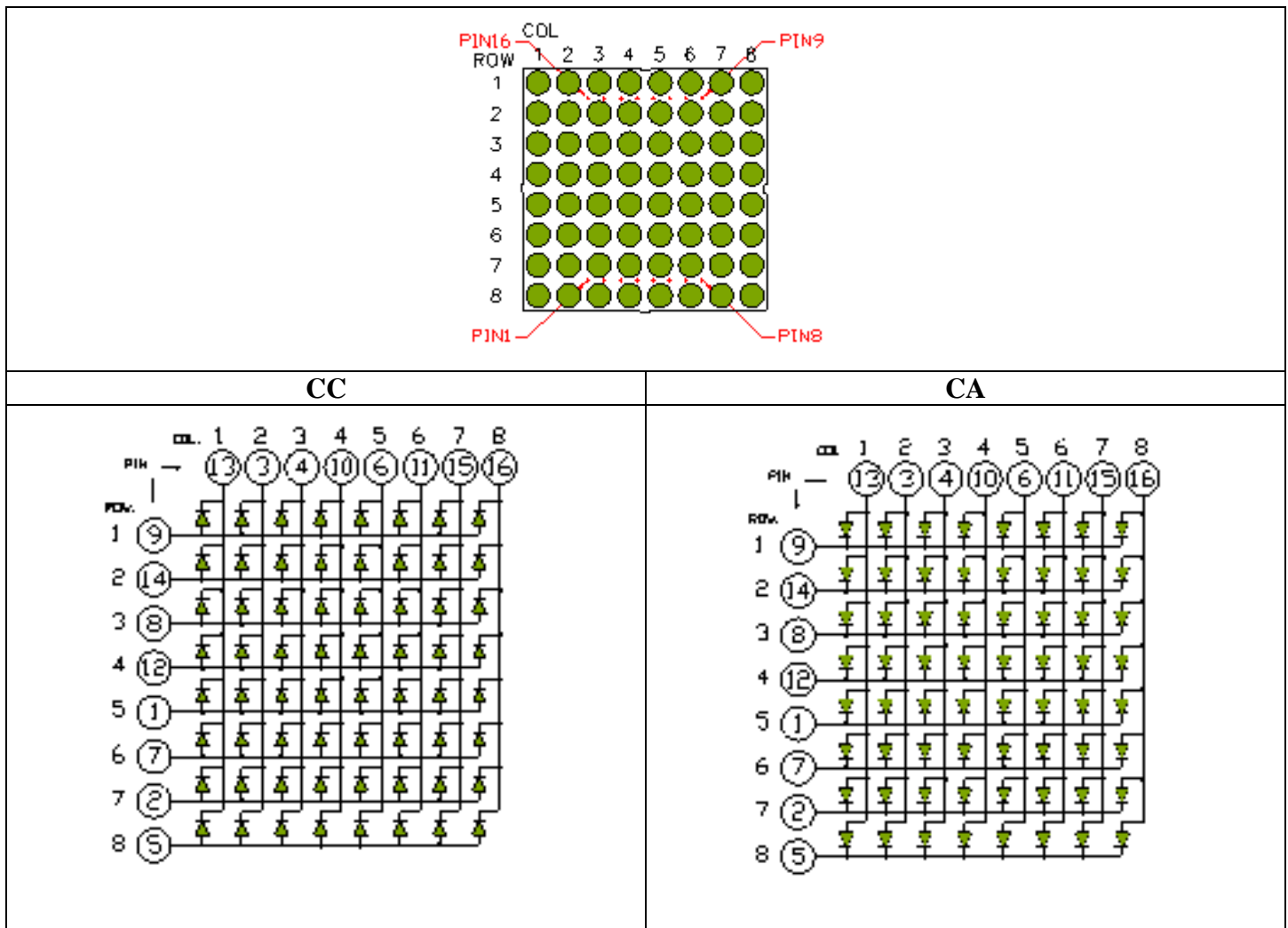
Absolute Maximum Rating

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
AllnGaP (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

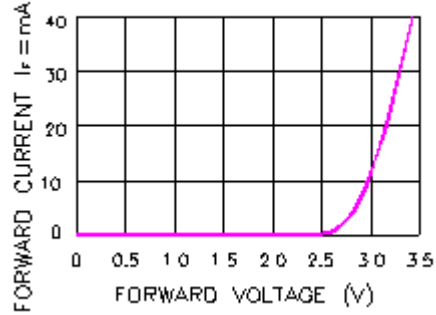
Pin Configuration



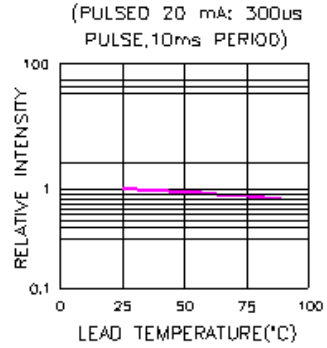
Characteristic Curves:

InGaN

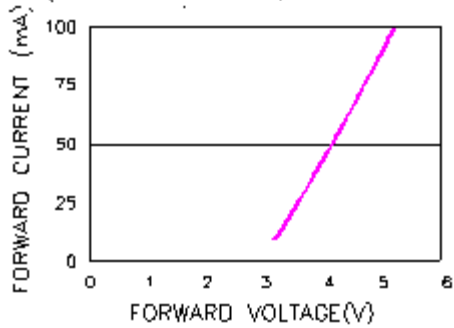
FORWARD CURRENT VS FORWARD VOLTAGE



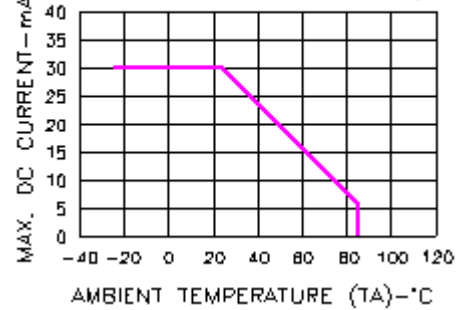
RELATIVE INTENSITY VS. LEAD TEMPERATURE



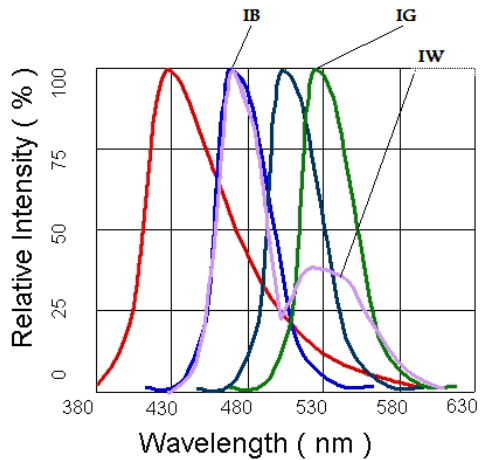
PEAK FORWARD VOLTAGE VS. FORWARD CURRENT
(100us TEST PULSE, 1% DUTY CYCLE)



MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

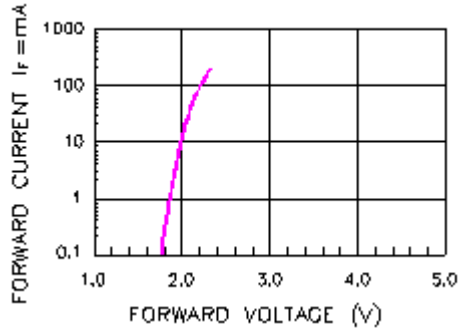


Relative Intensity vs. Wavelength

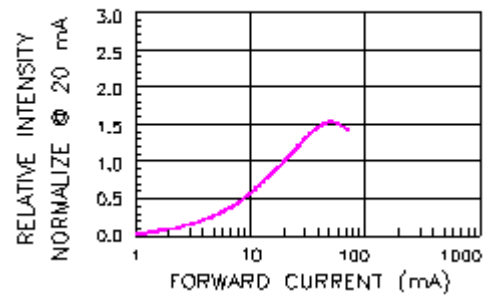


AlInGaP

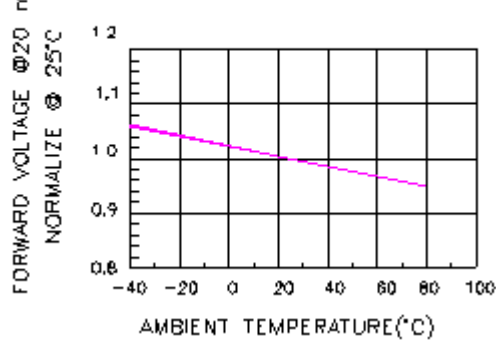
FORWARD CURRENT VS. FORWARD VOLTAGE



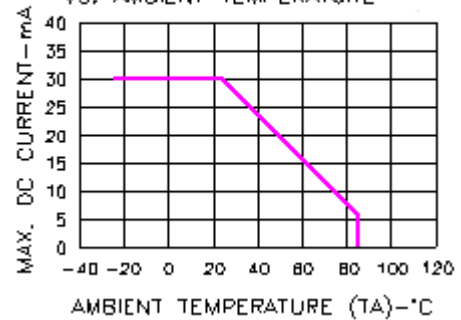
RELATIVE INTENSITY VS FORWARD CURRENT



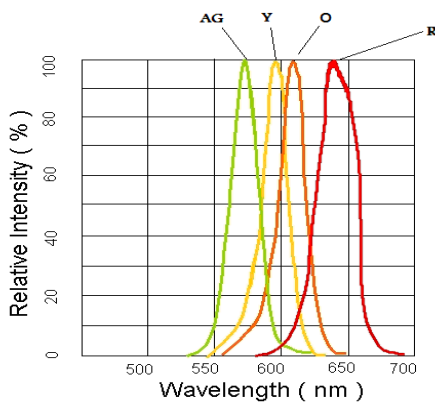
FORWARD VOLTAGE VS. TEMPERATURE



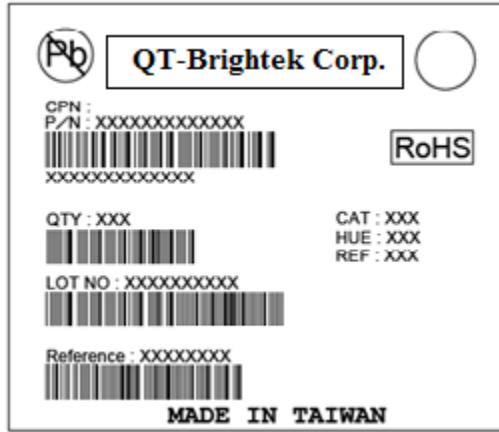
MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



Relative Intensity vs. Wavelength

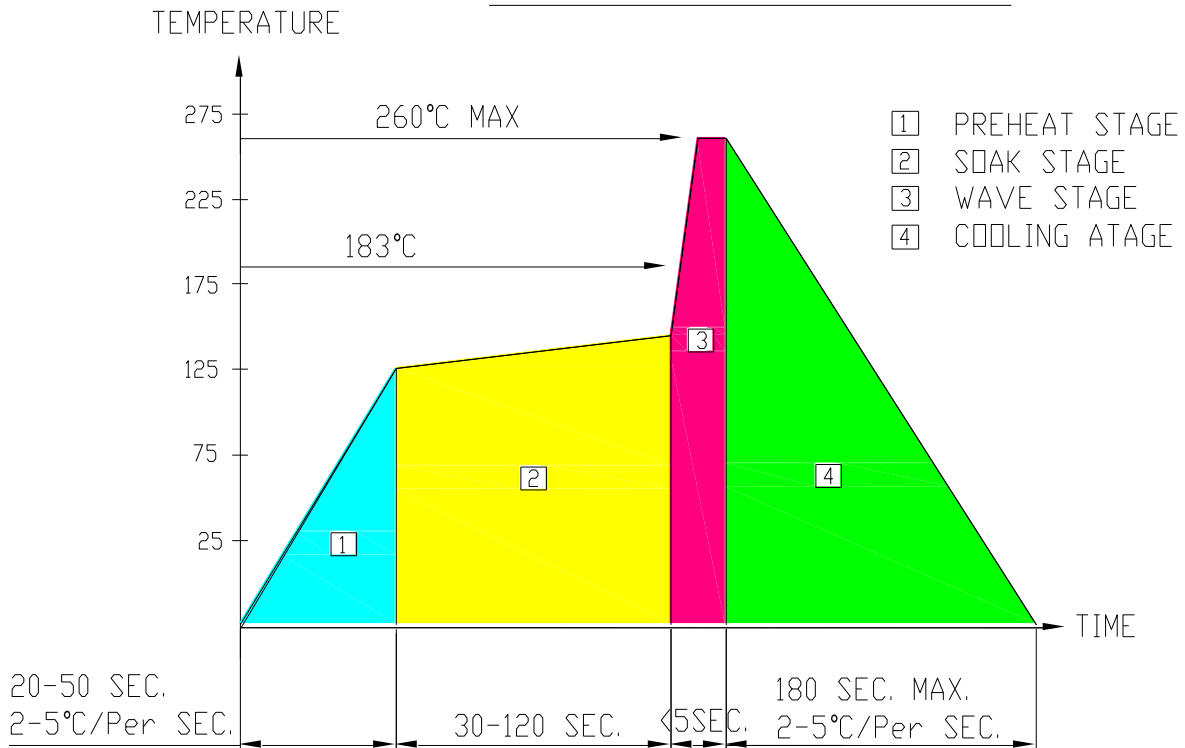


Labeling:



Soldering Profile:

WAVE SOLDER PROFILE



Ordering Information:

Product		Spec Range	Quantity per tube
CC	CA		
GMC15IB88	GMA15IB88	lv=160mcd typ. @ I _F =20mA	TBD
GMC15IG88	GMA15IG88	lv=200mcd typ. @ I _F =20mA	TBD
GMC15R88	GMA15R88	lv=60mcd typ. @ I _F =20mA	TBD
GMC15Y88	GMA15Y88	lv=35mcd typ. @ I _F =20mA	TBD
GMC15AG88	GMA15AG88	lv=25mcd typ. @ I _F =20mA	TBD

Revision History:

Description:	Revision #	Revision Date
New Release of GMX15X88_series	V1.0	05/26/2011
Amend Brightness & Part number to GMZ15XX88_series	V1.1	06/23/2011
Add Blue and Green Color Spec.	V1.2	07/13/2011