

Feature:

- 0.39" dual digit seven segments display
- Low power consumption
- Packed in reel
- White segment and grey surface
- Z = 0 (common anode) or 1 (common cathode)
- XX = color code

Description:

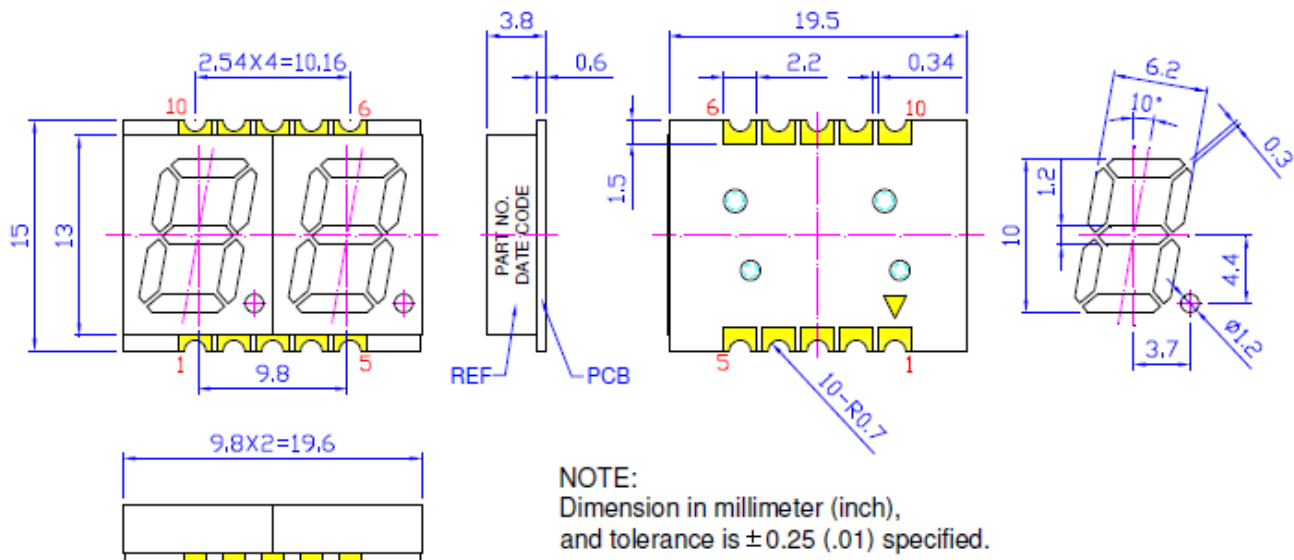
These 0.39" dual digit seven segments displays are made with white segment and grey surface. The viewing distance is up to seven meters.

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)
CA	CC				Typ.	Min.	Max.	Typ.
QBDS390R	QBDS391R	AlInGaP	Red	20	2.0	619	629	60
QBDS390Y	QBDS391Y	AlInGaP	Yellow	20	2.0	585	595	35
QBDS390AG	QBDS391AG	AlInGaP	Yellow Green	20	2.0	566	574	25
QBDS390IB	QBDS391IB	InGaP	Blue	20	3.0	460	470	200
QBDS390IG	QBDS391IG	InGaP	Green	20	3.0	520	535	200

Absolute Maximum Rating:

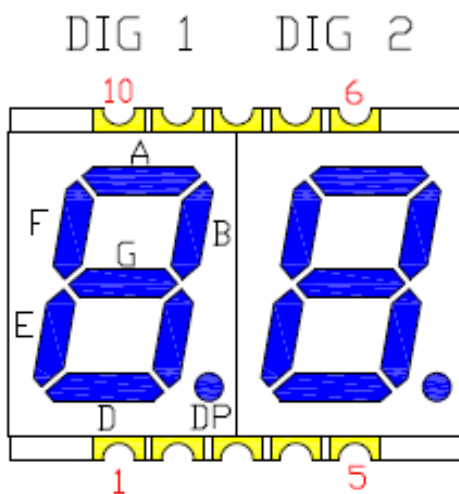
Material	P _d (mW)	Derating linear from 25C per dice (mA/C)	I _F (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AlInGaP	70	0.28	25	5	-40 to + 105	-40 to +105	260
InGaP	120	0.3	30	5	-40 to +105	-40 to +105	260

*Duty 1/10 @ 1KHz

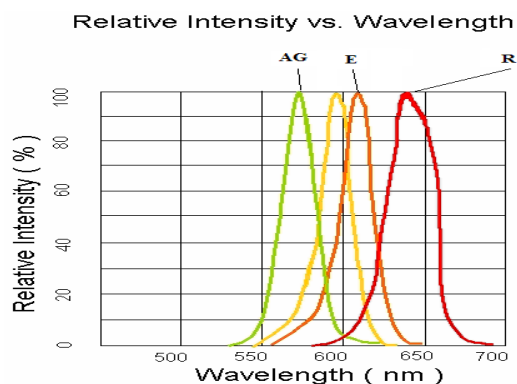
** IR Reflow for no more than 5 sec @ 260 °C

Pin Configuration:

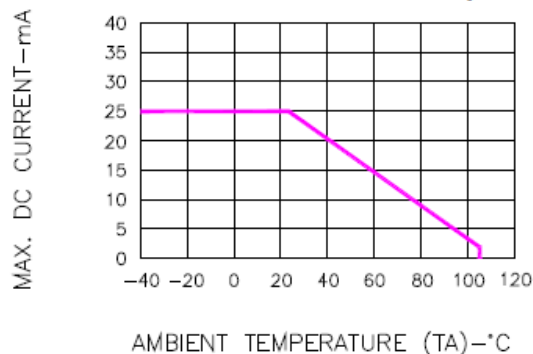
CC	CA
Common Cathode	Common Anode



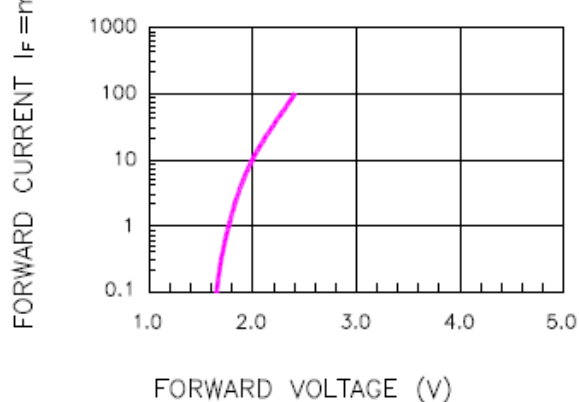
Characteristic Curves: (AlInGaP)



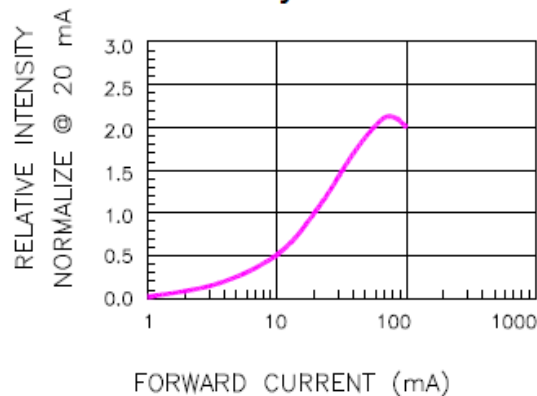
Max. DC current vs. Ambient Temperature



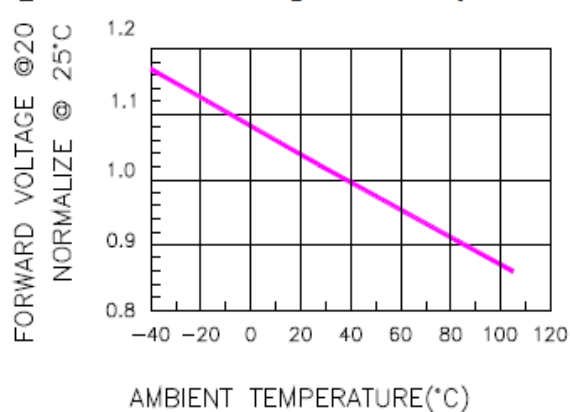
Forward Current vs. Forward Voltage



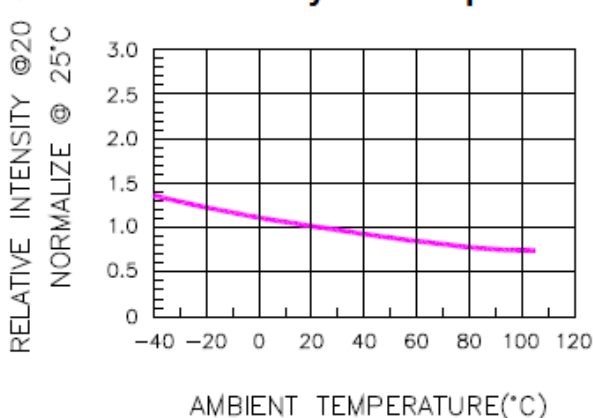
Relative Intensity vs. Forward Current



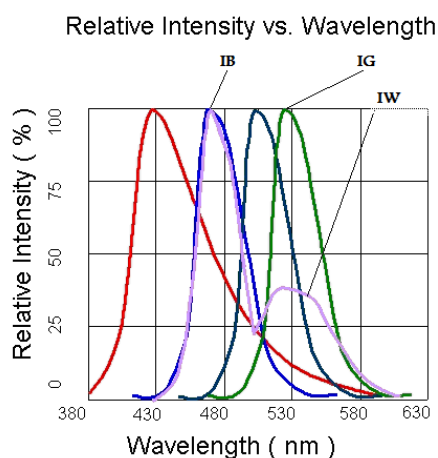
Forward Voltage vs. Temperature



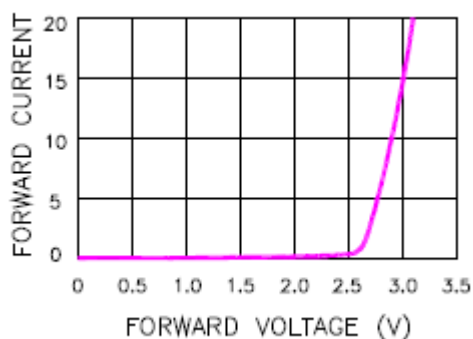
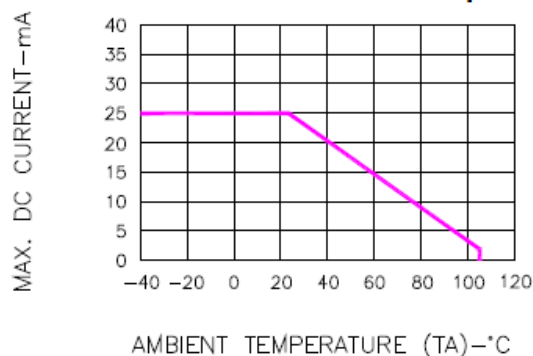
Relative Intensity vs. Temperature



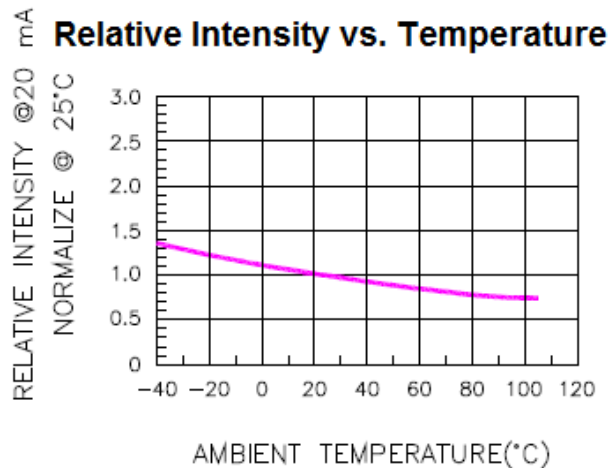
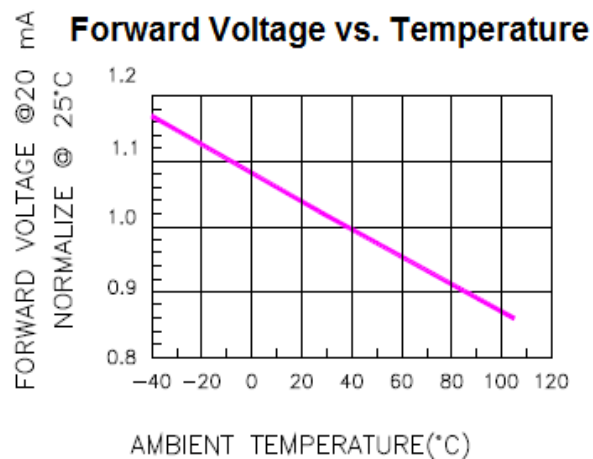
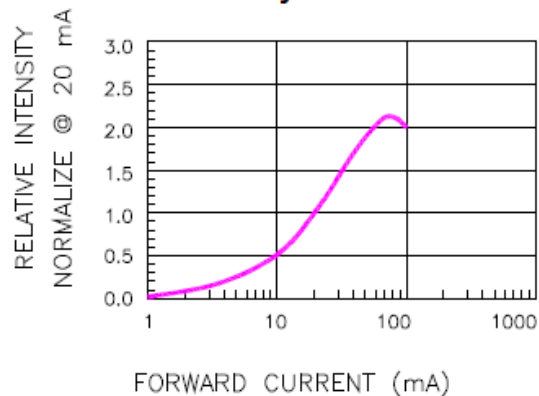
Characteristic Curves: (InGaN)



Max. DC current vs. Ambient Temperature

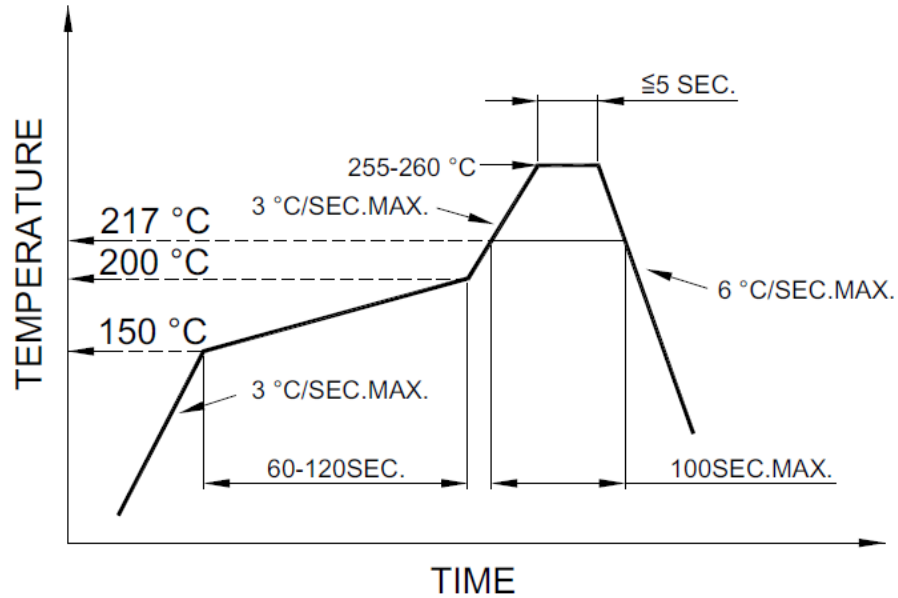


Relative Intensity vs. Forward Current

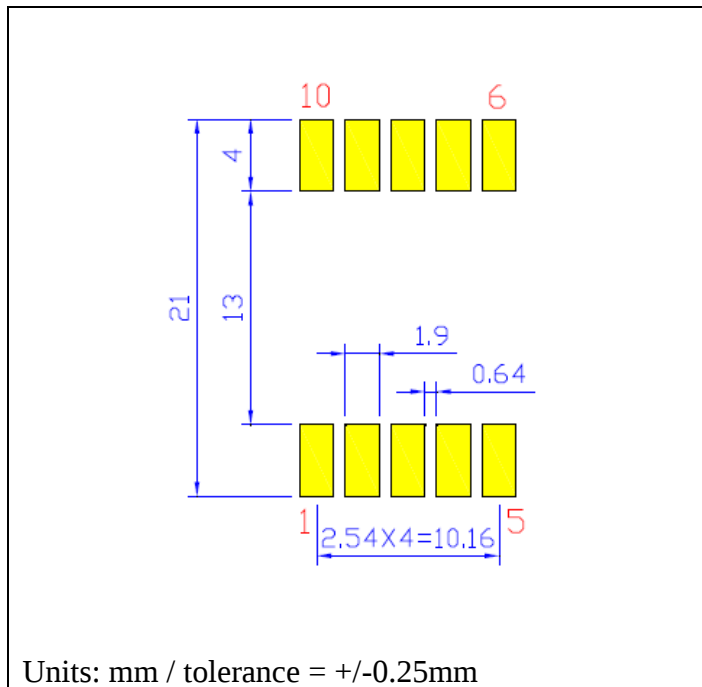


Solder Profile & Footprint:

Lead-free Solder Profile



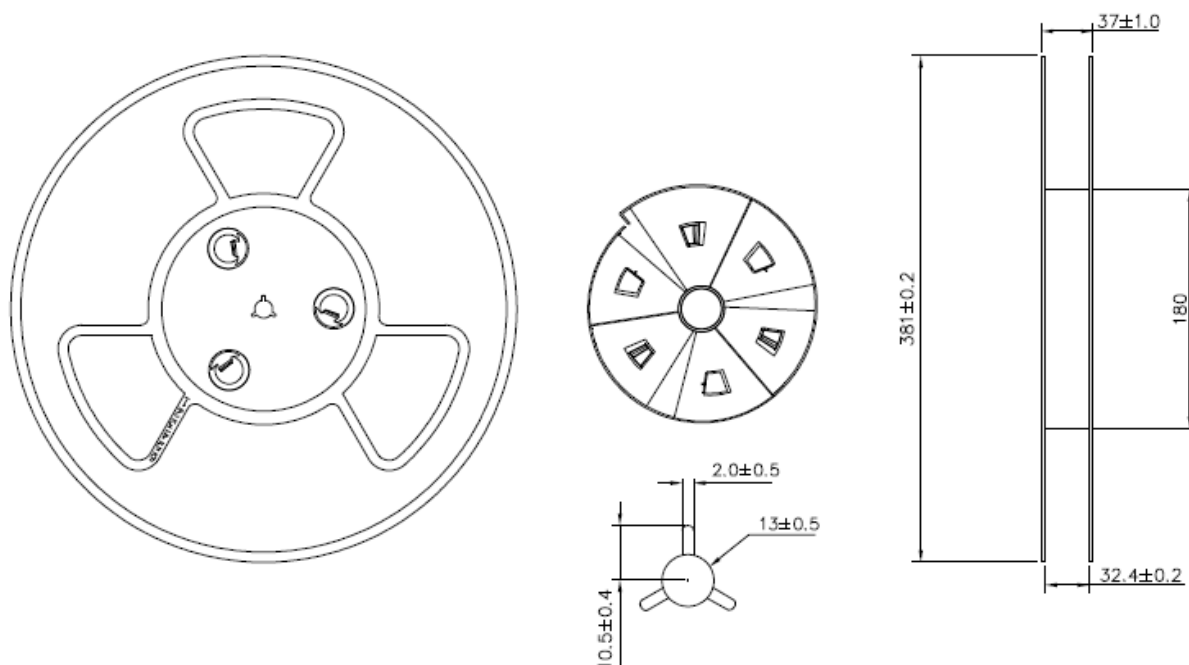
Soldering Profile



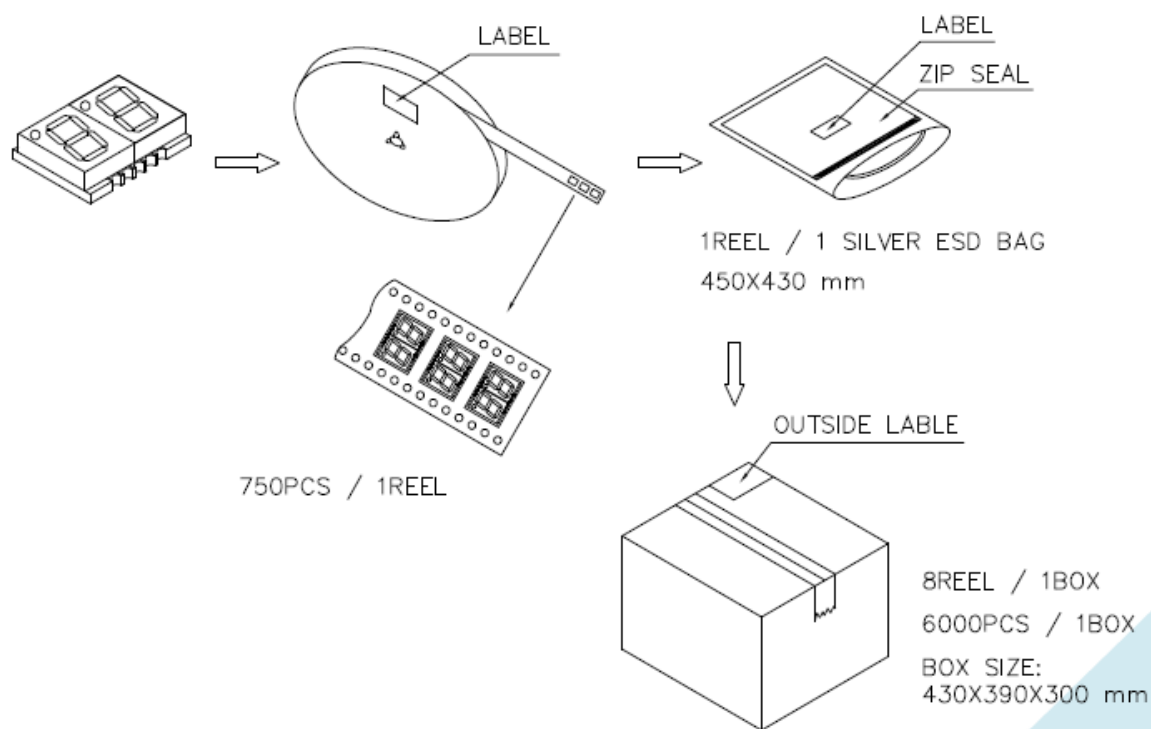
Ordering Information:

Product		Spec Range	Quantity per reel
CA	CA		
QBDS390R	QBDS391R	Iv = 60mcd typ.	1000pcs
QBDS390Y	QBDS391Y	Iv = 35mcd typ.	1000pcs
QBDS390AG	QBDS391AG	Iv = 25mcd typ.	1000pcs
QBDS390IB	QBDS391IB	Iv = 200mcd typ.	1000pcs
QBDS390IG	QBDS391IG	Iv = 200mcd typ.	1000pcs

Reel Dimension



Packing method



Revision History:

Description:	Revision #	Revision Date
New Release of QBDS39ZXX	V1.0	6/24/2011