Feature:

- 0.4” Dual digit seven segments display
- Low power consumption
- Packed in tube
- AlInGaP Technology R/Y/AG
- InGaN Technology IB/IG
- XX= color; Z= 1: Common Cathode or 0:Common Anode

Description:

These 0.4” Dual digit seven segments displays are made with white segment and grey surface. The viewing distance is up to seven meters.

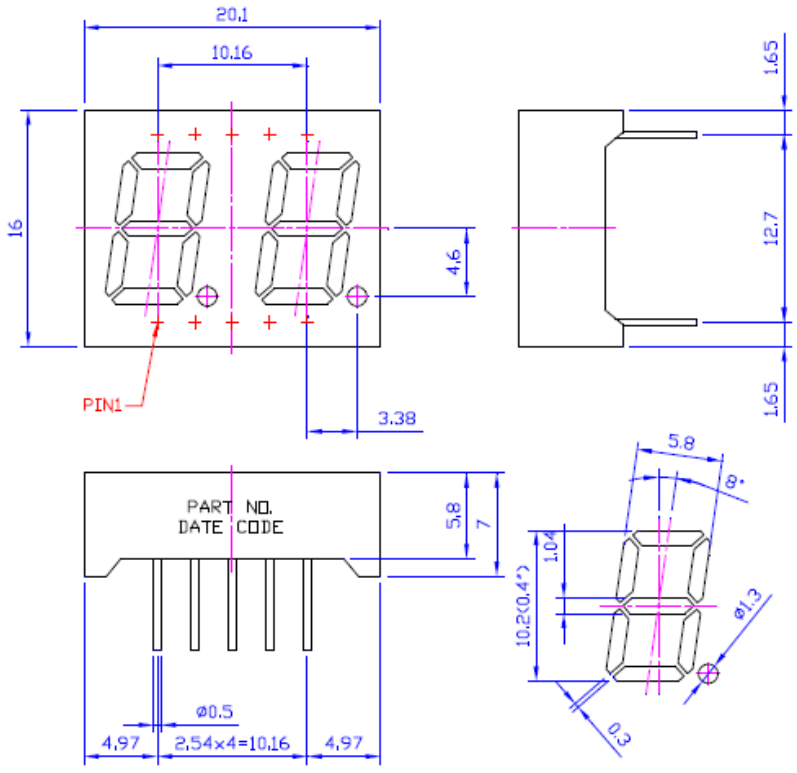
Application:

- 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_D (nm)		I_V(mcd)
CC	CA				Typ.	Min.	Max.	typ.
QBD40IB1	QBD40IB0	InGaN	Blue	20	3.2	460	470	160
QBD40IG1	QBD40IG0	InGaN	Green	20	3.2	500	530	200
QBD40R1	QBD40R0	AlInGaP	Red	20	2.0	619	629	60
QBD40Y1	QBD40Y0	AlInGaP	Yellow	20	2.0	585	595	35
QBD40AG1	QBD40AG0	AlInGaP	Yellow Green	20	2.0	565	575	25

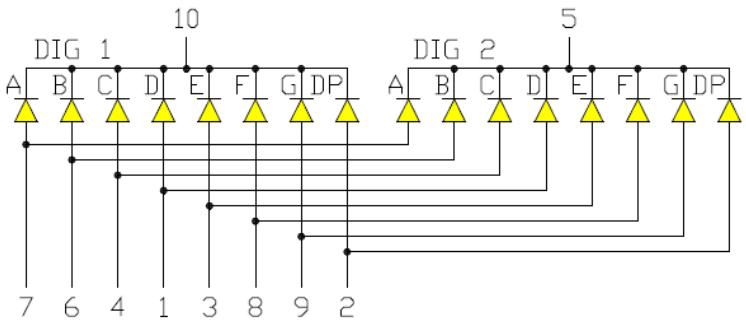
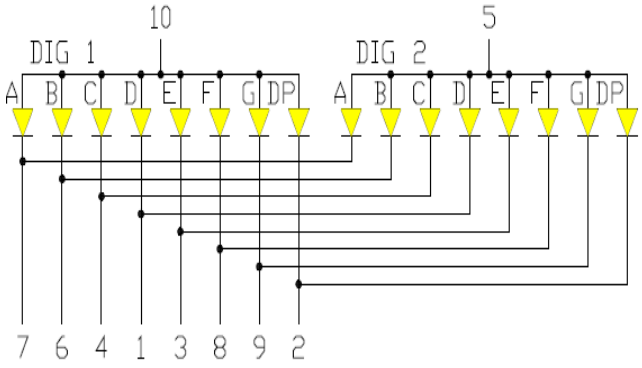
Absolute Maximum Rating

Material	P_d (mW)	Derating liner from 25 °C per dice (mA/ °C)	I_F (mA)	I_{PF} (mA)	V_R (V)	T_{OP} (°C)	T_{ST} (°C)
InGaN	120	0.4	30	120	5	-40 to + 85	-40 to +100
AlInGaP	70	0.33	25	90	5	-40 to + 85	-40 to +100

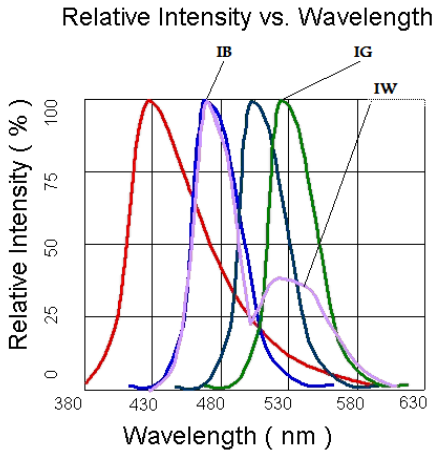
*Duty 1/10 @ 1KHz

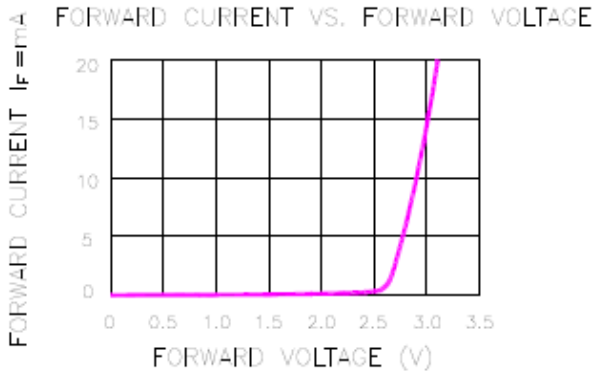
** IR Reflow for no more than 5 sec @ 260 °C

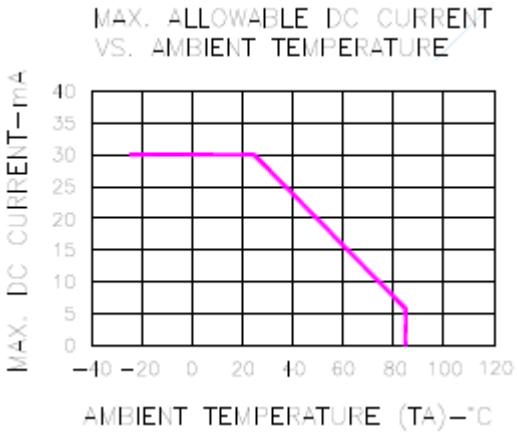
Pin Configuration

CC	CA
	

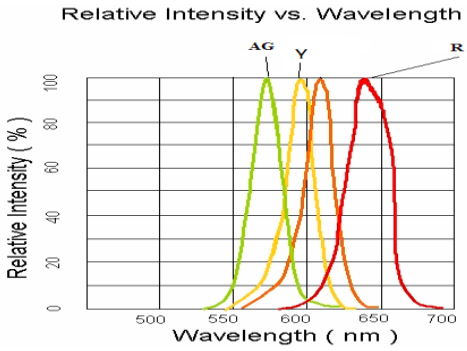
Characteristic Curves: (InGaN)

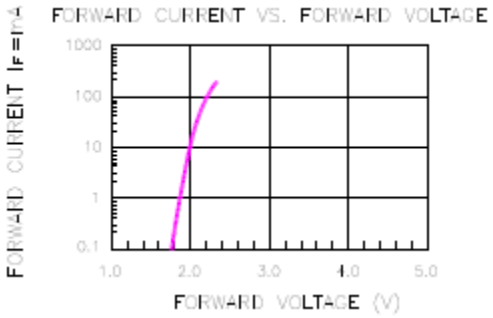


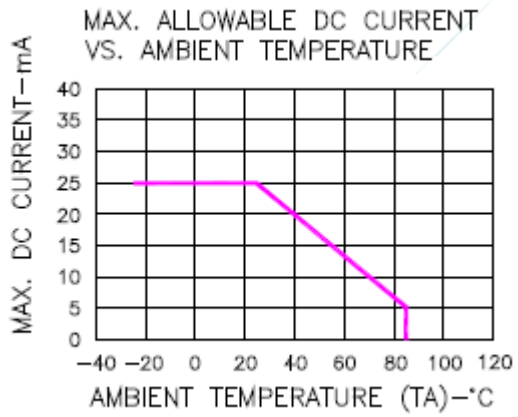




Characteristic Curves: (AlInGaP)







Ordering Information:

Product		Orderable Part #		Spec Range	Quantity per tube
CC	**CA**	**CC**	**CA**		
QBD40IB1	QBD40IB0	QBD40IB1	QBD40IB0	Iv= 160 mcd typ.	TBD
QBD40IG1	QBD40IG0	QBD40IG1	QBD40IG0	Iv= 200 mcd typ.	TBD
QBD40R1	QBD40R0	QBD40R1	QBD40R0	Iv= 60 mcdtyp.	TBD
QBD40Y1	QBD40Y0	QBD40Y1	QBD40Y0	Iv= 35 mcd typ.	TBD
QBD40AG1	QBD40AG0	QBD40AG1	QBD40AG0	Iv= 25 mcd typ.	TBD

Revision History:

Description:	Revision #	Revision Date
New Release of QBD40XXX_series	V1.0	09/20/2010
Information Updates	V2.0	05/04/2011
Amend Blue Brightness and Part number to QBS39XXZ / update characteristic curve	V2.1	06/24/2011