

QT-Brightek Display Series

0.40” Dual Digit Through Hole Display

Part No.: QBD40XXZ

XX= Color Code
Z = 0: Common Anode
Z= 1: Common Cathode

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	Version# 2.4	

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Introduction

Feature:

- 0.4" dual digit seven segments display
- Low power consumption
- Packed in foam
- Z=0: Common anode
- Z=1: Common cathode
- XX= Color code

Application:

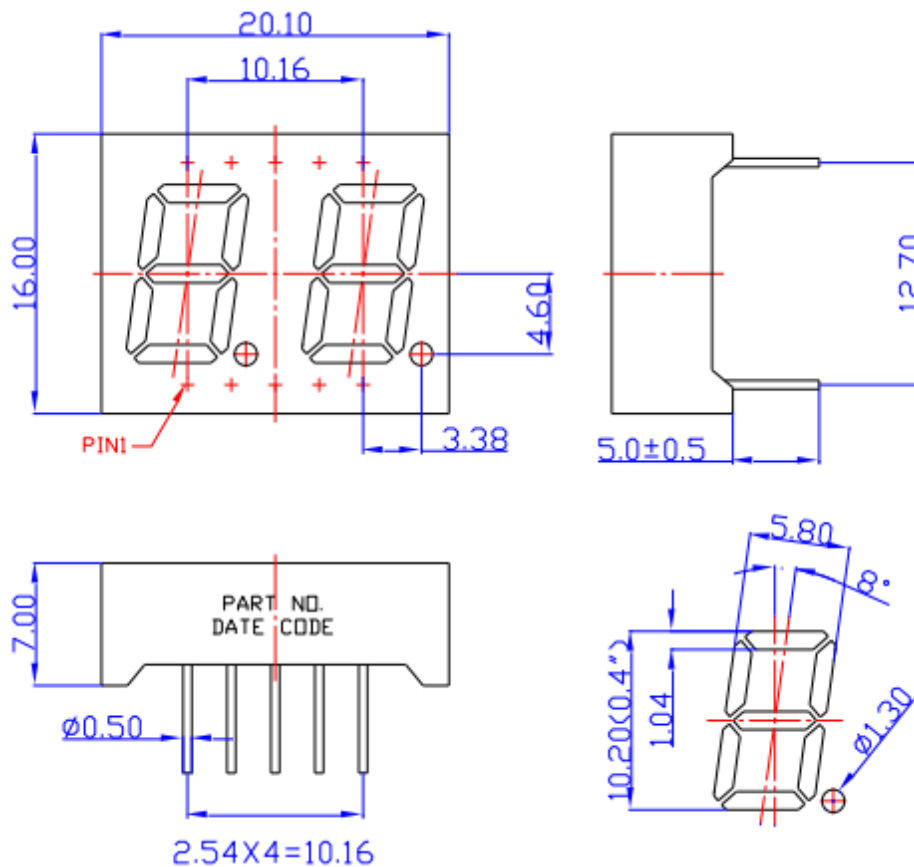
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.25mm

Electrical / Optical Characteristic (Ta=25 °C)

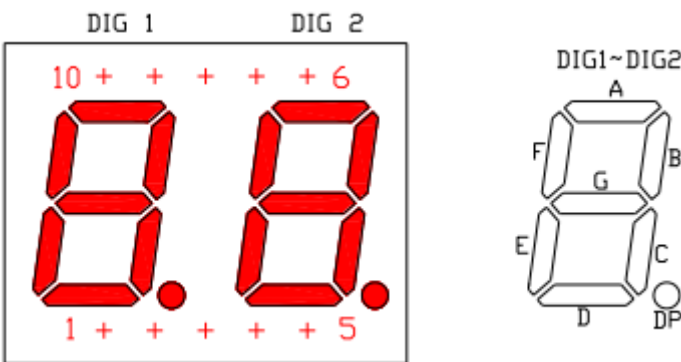
Product		Color	I _F (mA)	V _F (V)		λ _D (nm)			λ _P (nm)	I _V (mcd)
CA	CC			Typ.	Max.	Min.	Typ.	Max.	Typ.	Typ.
QBD40S0	QBD40S1	Deep Red	20	2.1	2.4	635	640	648	650	15
QBD40R30	QBD40R31	Red	20	2.1	2.4	625	631	637	645	40
QBD40R0	QBD40R1	Red	20	2.1	2.4	619	624	629	632	45
QBD40O0	QBD40O1	Orange	20	2.0	2.4	600	606	610	612	40
QBD40Y0	QBD40Y1	Yellow	20	2.1	2.4	585	590	595	593	40
QBD40AG0	QBD40AG1	Yellow Green	20	2.1	2.4	567	571	576	573	15
QBD40IG0	QBD40IG1	True Green	20	2.8	3.2	515	525	530	-	200
QBD40IB0	QBD40IB1	Blue	20	3.0	3.4	460	465	475	-	40

Absolute Maximum Rating

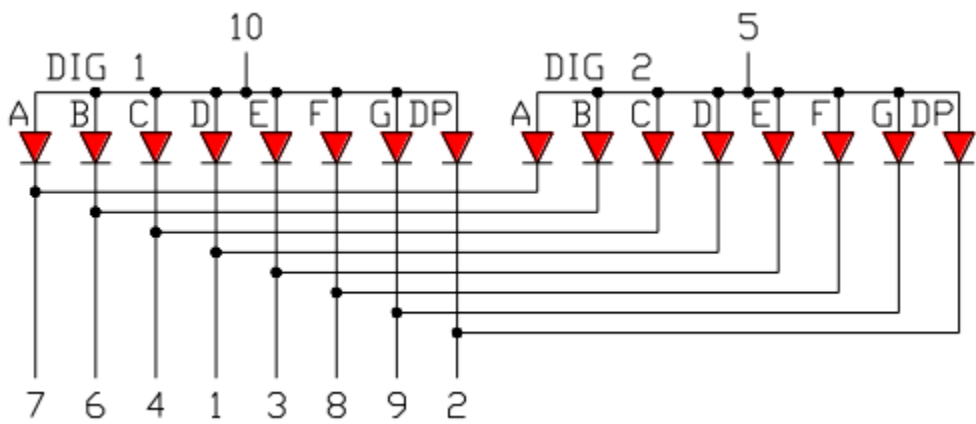
Material	P _d (mW)	I _F (mA)	I _{PF} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
AlInGaP	48	20	40	5	-40 to +85	-40 to +85
InGaN	68	20	60	5	-40 to +85	-40 to +85

*Duty 1/10 @ 1KHz

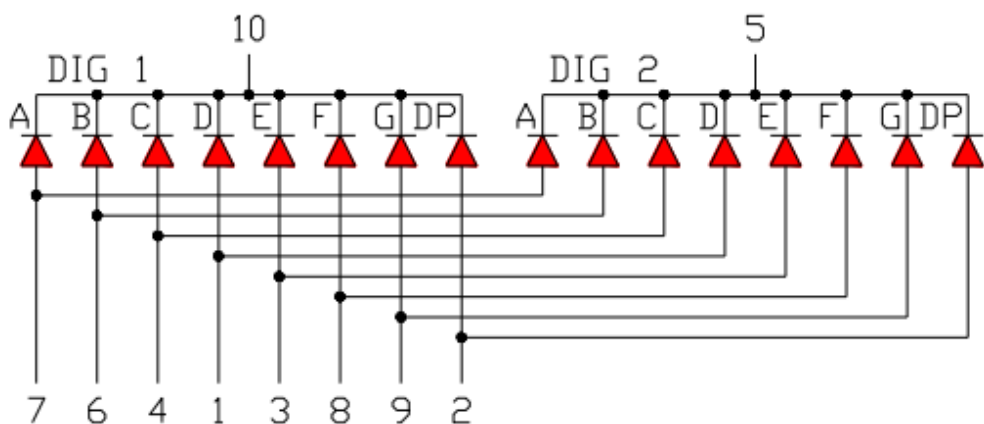
Pin Configuration



CA (QBD40XX0)

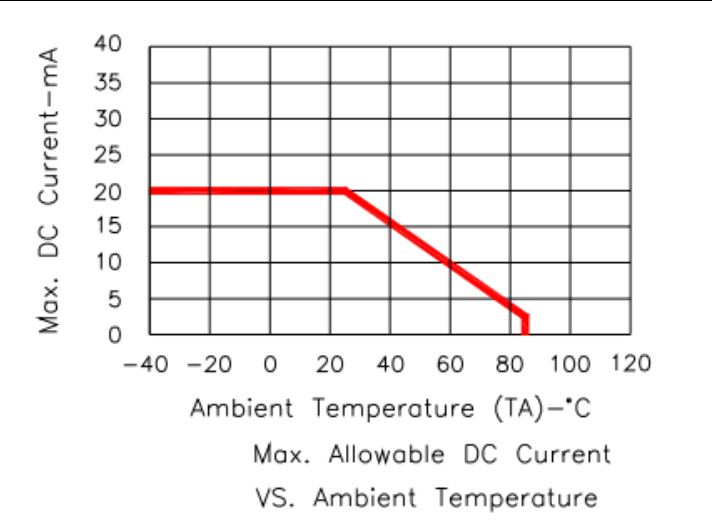
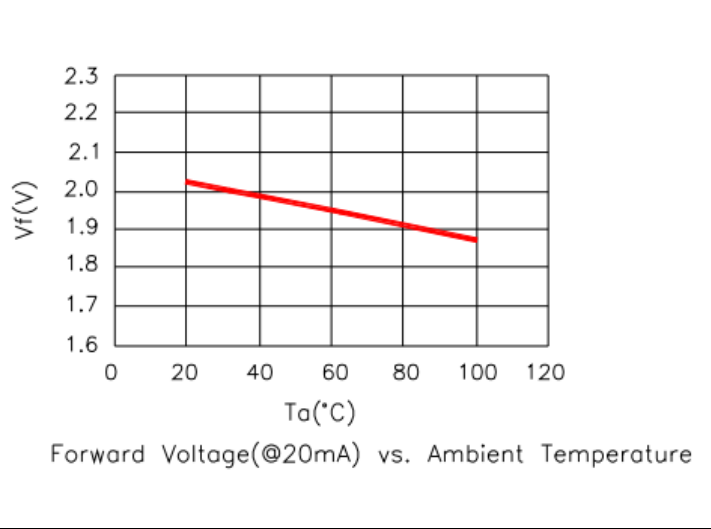
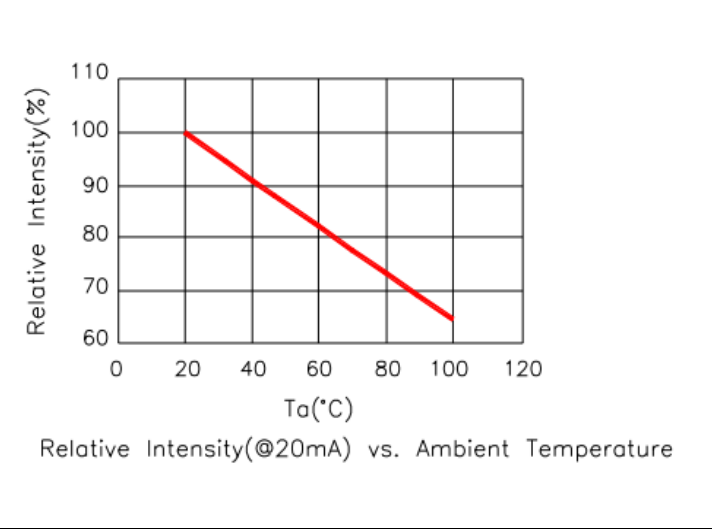
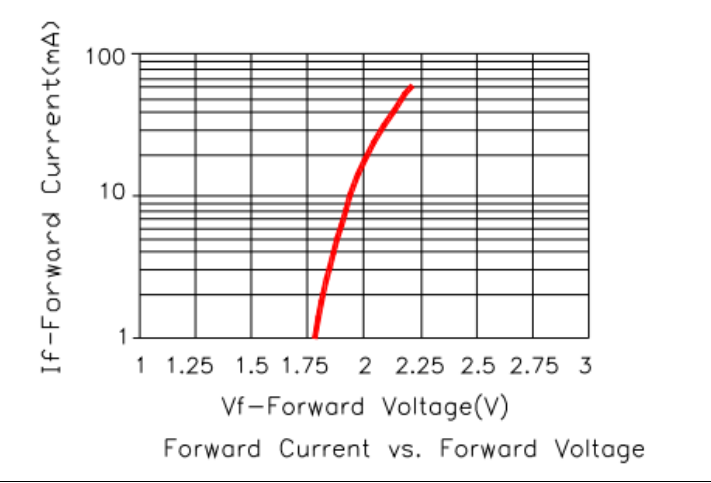
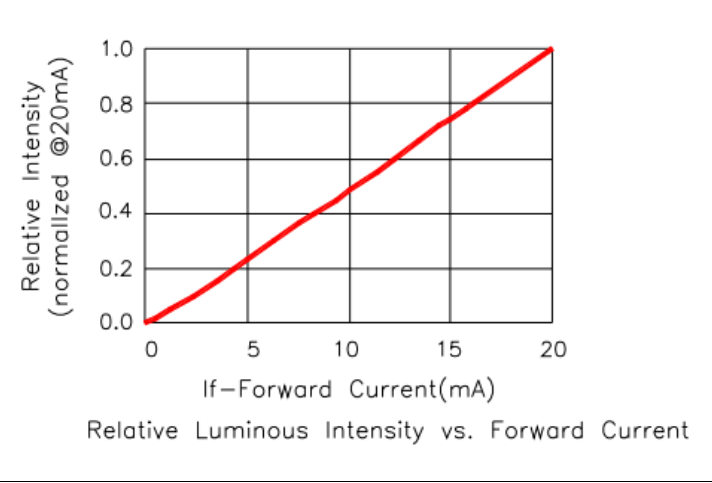


CC (QBD40XX1)

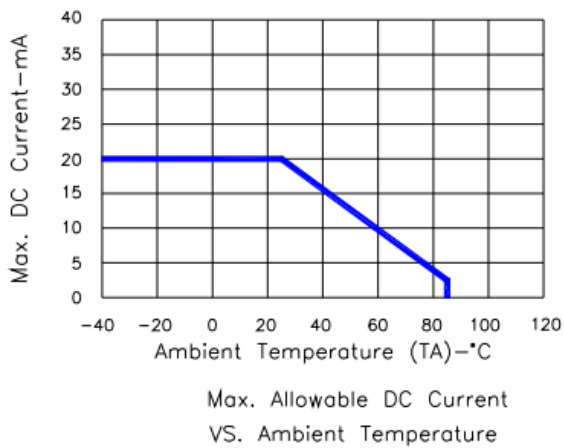
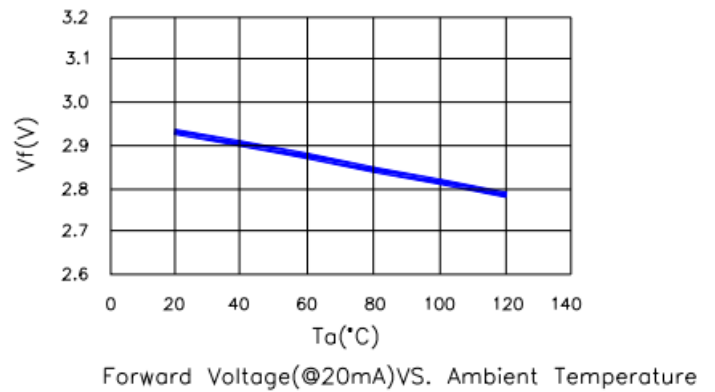
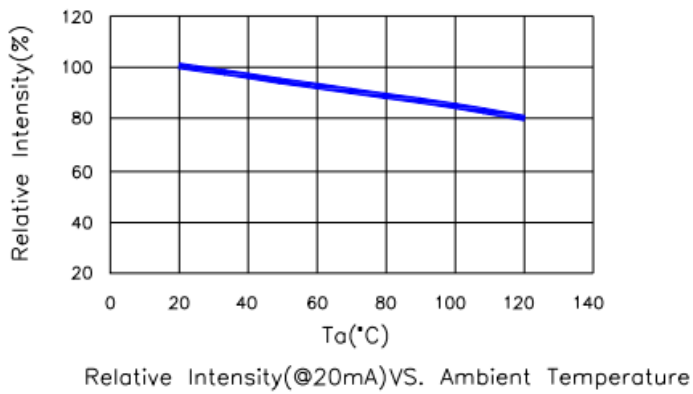
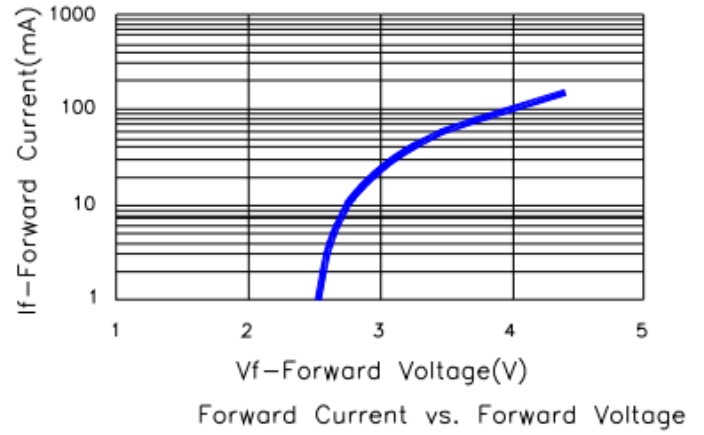
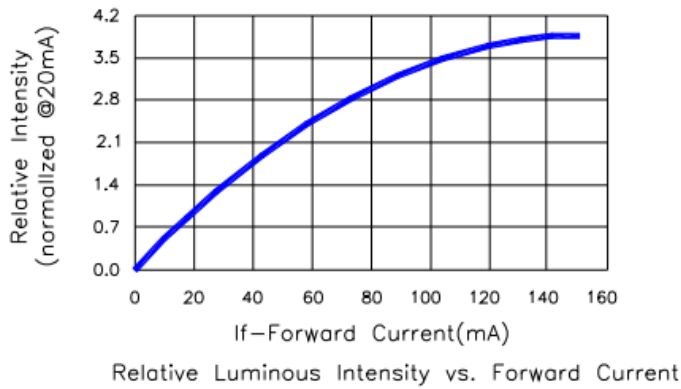


Characteristic Curves

AllnGaP (S, R3, R, O, Y, AG)

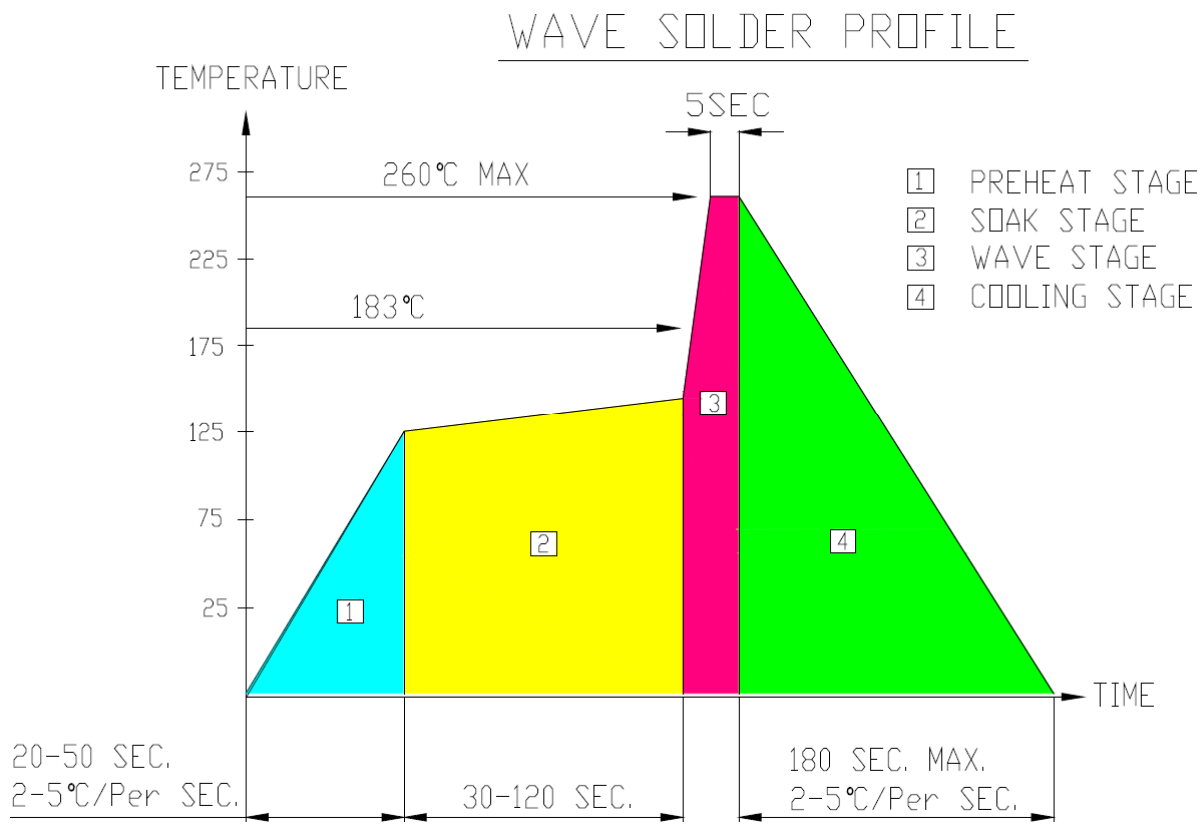


InGaN (IG, IB)



Solder Profile

Recommended Solder Profile



Ordering Information

Orderable Part #		Spec Range	Quantity per foam
CA	CC		
QBD40S0	QBD40S1	Iv=15mcd typ. @ I _F =20mA, λ _D =640nm typ.	252pcs
QBD40R30	QBD40R31	Iv=40mcd typ. @ I _F =20mA, λ _D =631nm typ.	
QBD40R0	QBD40R1	Iv=45mcd typ. @ I _F =20mA, λ _D =625nm typ.	
QBD40O0	QBD40O1	Iv=40mcd typ. @ I _F =20mA, λ _D =606nm typ.	
QBD40Y0	QBD40Y1	Iv=40mcd typ. @ I _F =20mA, λ _D =590nm typ.	
QBD40AG0	QBD40AG1	Iv=15mcd typ. @ I _F =20mA, λ _D =571nm typ.	
QBD40IG0	QBD40IG1	Iv=200mcd typ. @ I _F =20mA, λ _D =525nm typ.	
QBD40IB0	QBD40IB1	Iv=40mcd typ. @ I _F =20mA, λ _D =465nm typ.	

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
Amend to the new format/ brightness	V2.2	10/21/2013
Update Spec / Add Packing Info	V2.3	08/21/2015
Update format / add R3 color option	V2.4	02/18/2025

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.