

QT-Brightek Display Series

0.56" Single Digit Display

Part No.: QBSLDXX56ZGR

XX= Color

Z= 1: Common Cathode

Z = 0: Common Anode

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Introduction

Feature:

- 0.56" Single digit seven segments display
- Low power consumption
- AllInGaP Technology R/O/S/AG/Y
- InGaN Technology IB/IG
- Z= 1: Common Cathode or 0:Common Anode
- XX= color
- Grey Face

Description:

These 0.56" Single-digit, seven-segment displays are made with white segments and a grey surface. The viewing distance is up to seven meters.

Application:

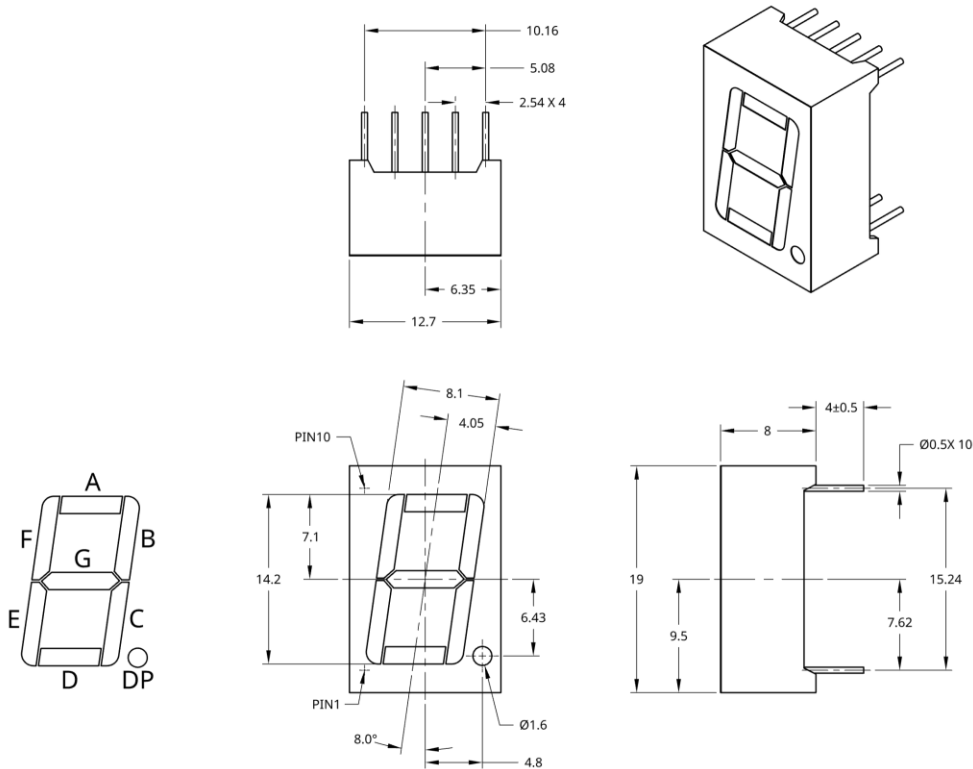
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.25mm

Electrical / Optical Characteristic (Ta=25 °C)

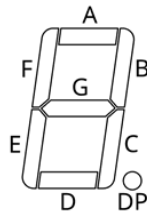
Product		Material	Color	I _F (mA)	V _F (V)		λ _D (nm)	λ _P (nm)	I _V (mcd)
CC	CA				Typ.	Max.	Typ.	Typ.	Typ.
QBSLDR561GR	QBSLDR560GR	AllnGaP	Red	20	2.0	2.4	624	632	40@10mA 80@20mA
QBSLDS561GR	QBSLDS560GR	AllnGaP	Red	20	2.0	2.4	640	660	7.5@10mA 15@20mA
QBSLDO561GR	QBSLDO560GR	AllnGaP	Orange	20	2.0	2.4	605	610	15@10mA 30@20mA
QBSLDAG561GR	QBSLDAG560GR	AllnGaP	Yellow-Green	20	2.0	2.4	572	575	9@10mA 18@20mA
QBSLDY561GR	QBSLDY560GR	AllnGaP	Yellow	20	2.0	2.4	590	593	14@10mA 28@20mA
QBSLDIG561GR	QBSLDIG560GR	InGaP	Green	20	3.0	3.2	525	520	110@10mA 220@20mA
QBSLDIB561GR	QBSLDIB560GR	InGaP	Blue	20	3.0	3.2	470	468	25@10mA 50@20mA

Absolute Maximum Rating

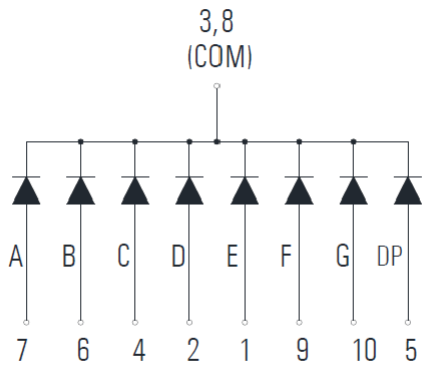
Material	P _d (mW)	I _F (mA)	I _{PF} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
AllnGaP	48	20	40	5	-40 to +80	-40 to +85
InGaP	64	20	40	5	-40 to +80	-40 to +85

*Duty 1/10 @ 1KHz

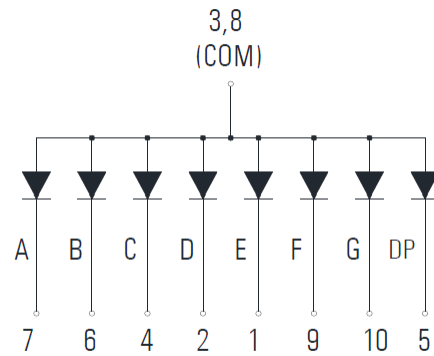
Pin Configuration



Common Cathode (QBSLDXX561GR)

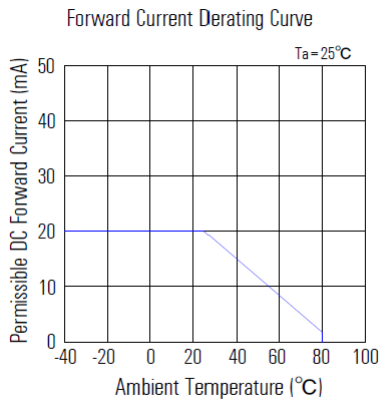
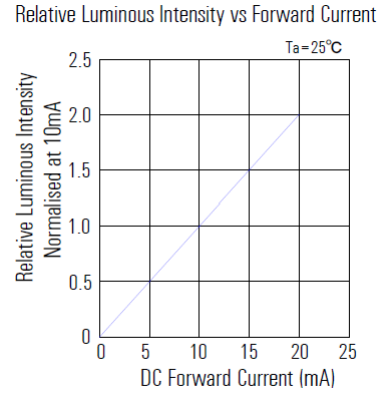
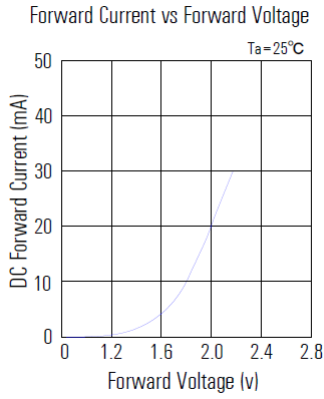


Common Anode (QBSLDXX560GR)

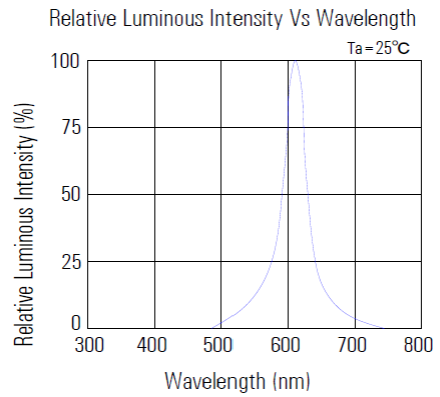


Characteristic Curves

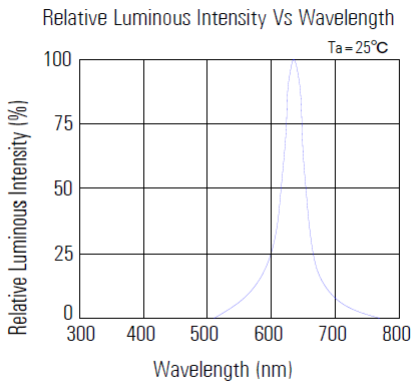
AllnGaP (R/O/AG)



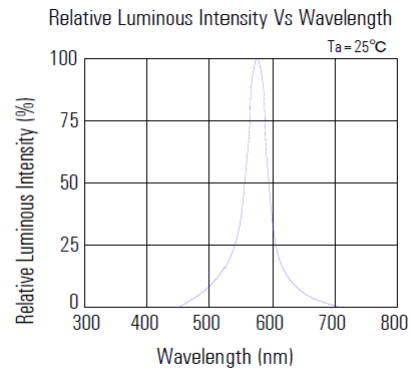
O(Orange)



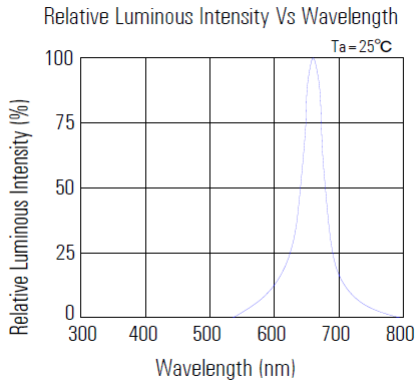
R(Red)



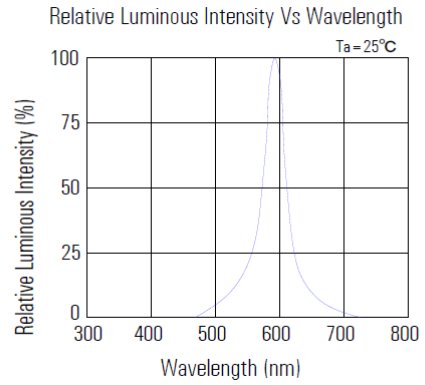
AG(Green)



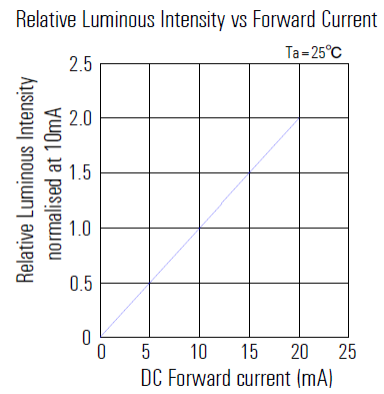
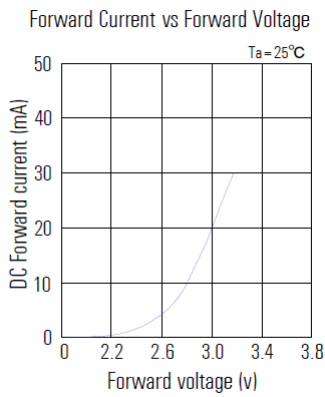
S(Deep Red)



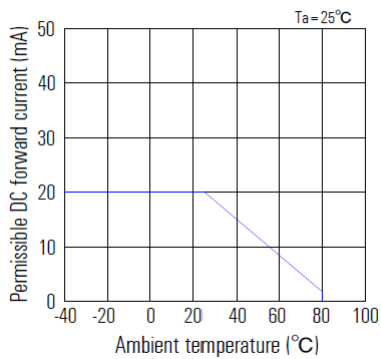
Y(Yellow)



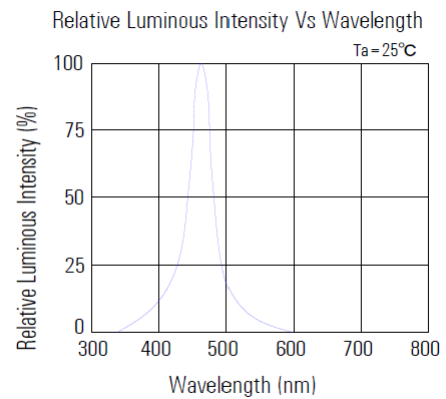
InGaN (IG/IB)



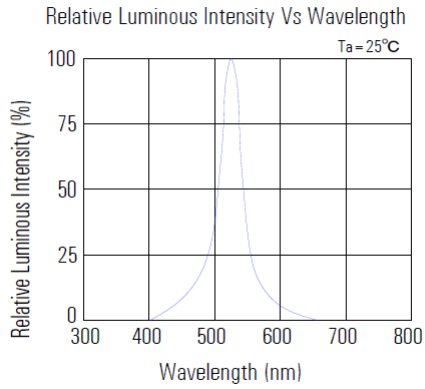
Forward Current Derating Curve



IB(Blue)

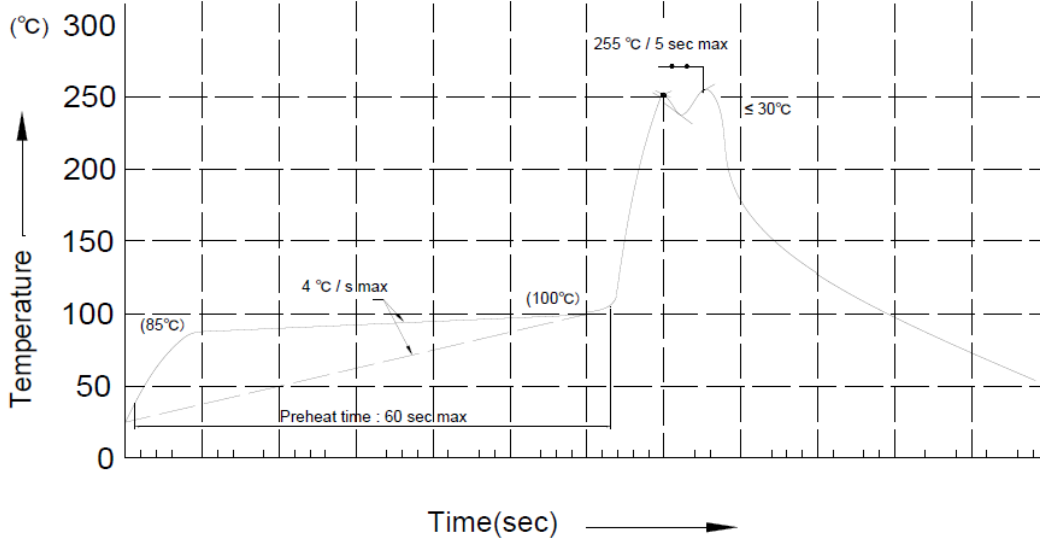


IG(Ture Green)

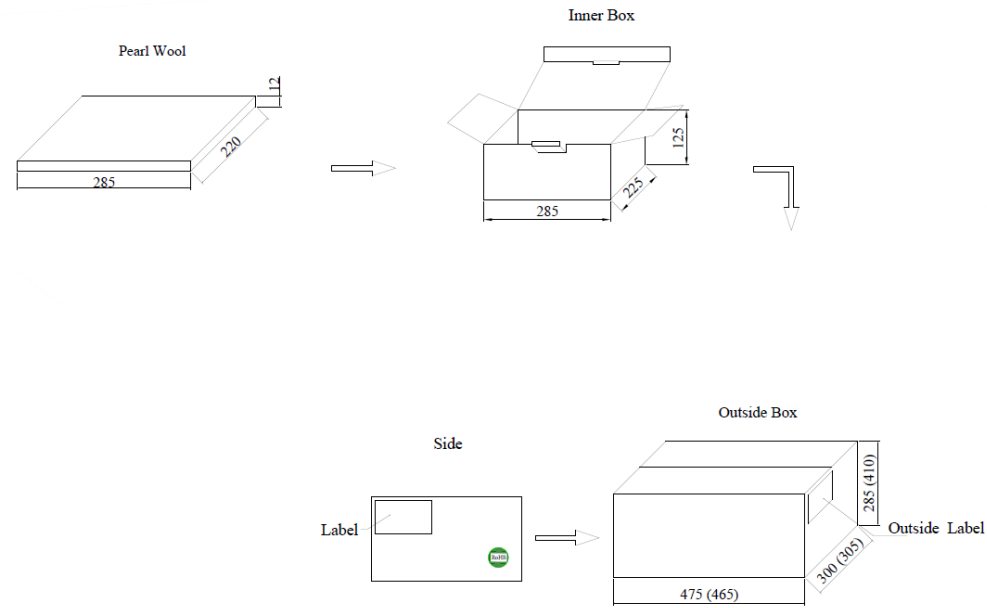


Solder Profile

Recommended Solder Profile



Packing



Unit: cm

Product: QBSLDXX56ZGR_series	Date: July 21, 2023	Page 10 of 12
	Version# 1.0	

Ordering Information

Product		Spec Range	Quality per foam
CC	CA		
QBSLDR561GR	QBSLDR560GR	I _v =80mcd typ. @ I _F =20mA, λ _D =624nm typ.	200
QBSLDS561GR	QBSLDS560GR	I _v =15mcd typ. @ I _F =20mA, λ _D =640nm typ.	200
QBSLDO561GR	QBSLDO561GR	I _v =30mcd typ. @ I _F =20mA, λ _D =605nm typ.	200
QBSLDAG561GR	QBSLDAG561GR	I _v =18mcd typ. @ I _F =20mA, λ _D =572nm typ.	200
QBSLDY561GR	QBSLDY560GR	I _v =28mcd typ. @ I _F =20mA, λ _D =590nm typ.	200
QBSLDIG561GR	QBSLDIG560GR	I _v =220mcd typ. @ I _F =20mA, λ _D =525nm typ.	200
QBSLDIB561GR	QBSLDIB560GR	I _v =50mcd typ. @ I _F =20mA, λ _D =470nm typ.	200

Revision History

Description:	Revision #	Revision Date
New Release of QBSLDXX56ZGR_series	V1.0	07/21/2023



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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.