

QT-Brightek Display Series

0.54" Dual Digit Alphanumeric Display

Part No.: QBAD54XXZ

Z = 1: Common Cathode

Z = 0: Common Anode



Table of Contents:

Introduction 3

Electrical / Optical Characteristic (Ta=25 °C) 4

Pin Configuration 5

Characteristic Curves..... 6

Solder Profile & Footprint..... 8

Packing 9

Ordering Information 10

Revision History 11

Disclaimer 11

Product: QBAD54XXZ	Date: March 15, 2021	Page 2 of 11
	Version# 2.4	

Introduction

Feature:

- 0.54" Dual digit fourteen-segment display
- Low power consumption
- Packed in Board
- Gray face and White segment
- AllInGaP Technology for R, S, Y, AG
- InGaN Technology for IG, IB
- XX= color; Z=1: Common Cathode or 0: common Anode

Description:

These 0.54" Dual digit fourteen-segment displays are made with white segment and gray surface. The viewing distance is up to seven meters.

Application:

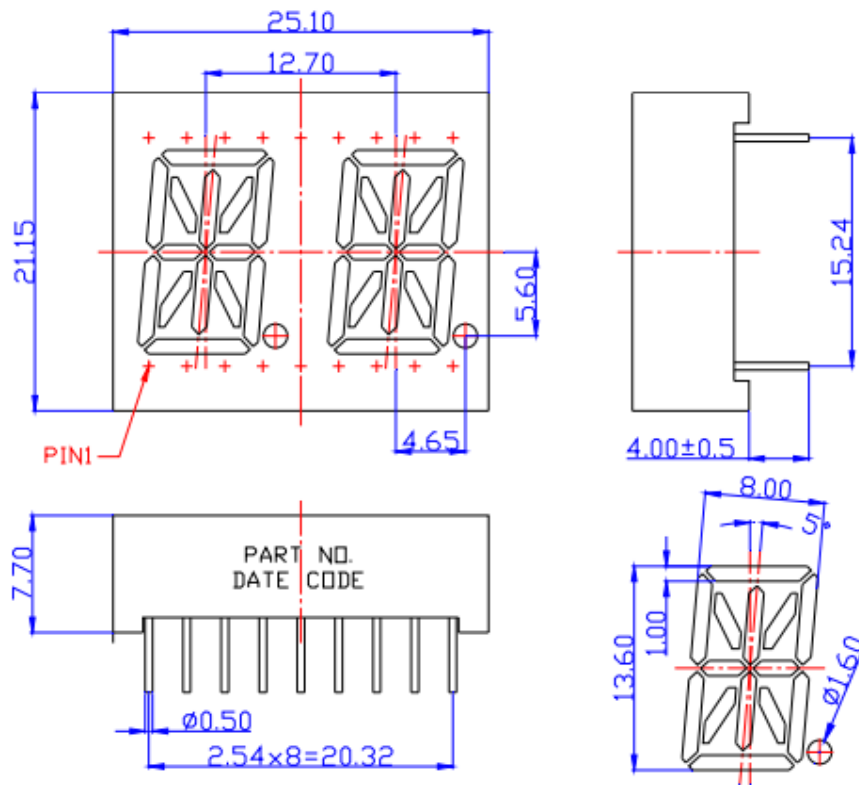
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.25mm

Electrical / Optical Characteristic (Ta=25 °C)

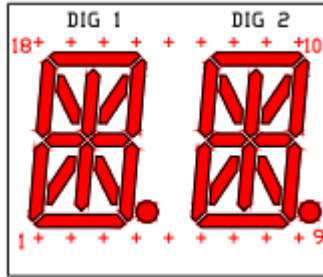
Product		Material	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)
CC	CA				Typ.	Max.	Min.	Typ.	Max.	Typ.
QBAD54R1	QBAD54R0	AllnGaP	Red	20	2.1	2.4	619	625	629	60
QBAD54S1	QBAD54S0	AllnGaP	Deep Red	20	2.1	2.4	635	639	648	30
QBAD54O1	QBAD54O0	AllnGaP	Orange	20	2.0	2.4	600	606	610	60
QBAD54Y1	QBAD54Y0	AllnGaP	Yellow	20	2.1	2.4	585	590	595	60
QBAD54AG1	QBAD54AG0	AllnGaP	Yellow Green	20	2.1	2.4	567	571	576	25
QBAD54IG1	QBAD54IG0	InGaN	True Green	20	2.8	3.2	515	525	530	250
QBAD54IB1	QBAD54IB0	InGaN	Blue	20	3.0	3.4	460	465	474	60

Absolute Maximum Rating

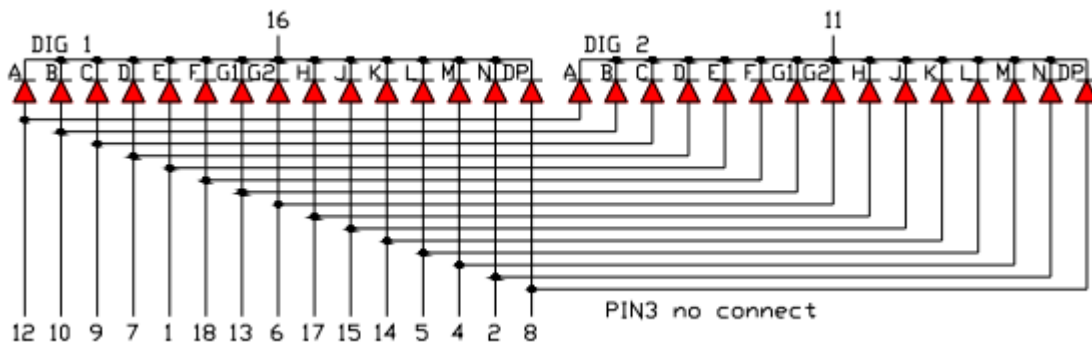
Material	P _d (mW)	I _F (mA)	I _{PF} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
AllnGaP	48	20	40	5	-40 to +85	-40 to +85
InGaN	68	20	60	5	-40 to +85	-40 to +85

*Duty 1/10 @ 1KHz

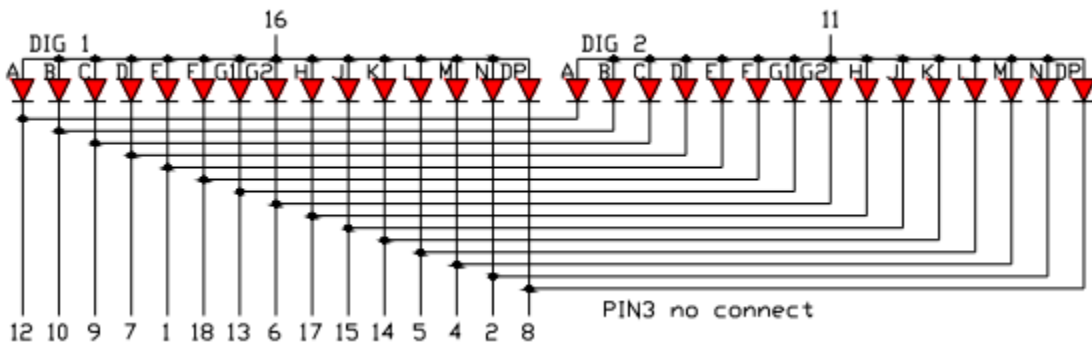
Pin Configuration



CC

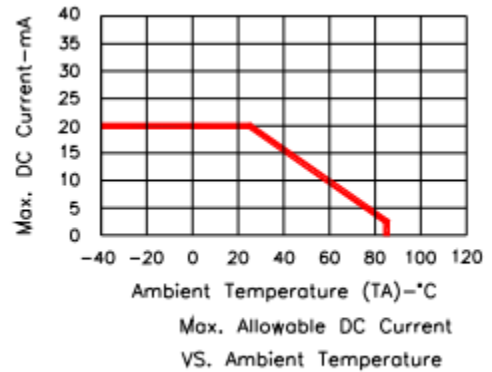
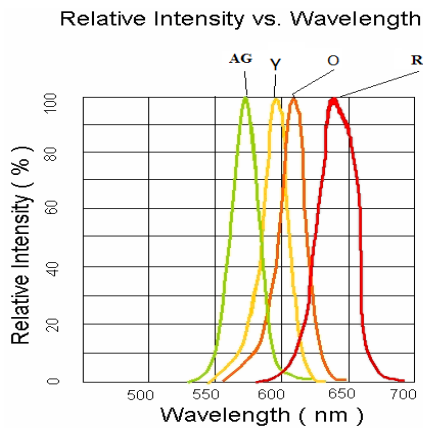
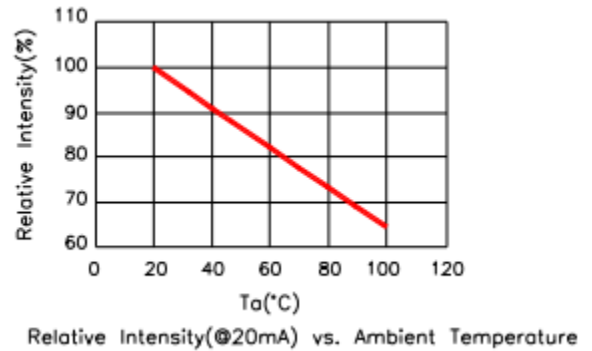
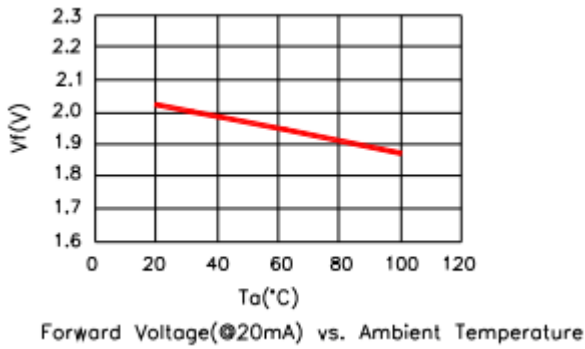
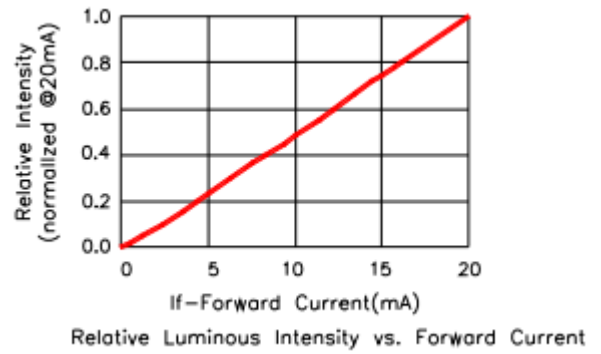
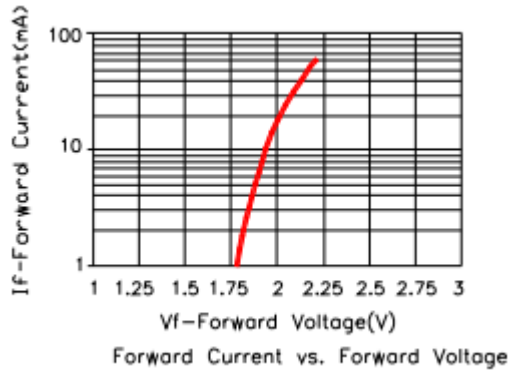


CA

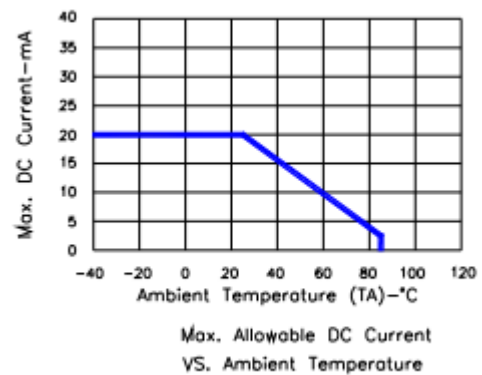
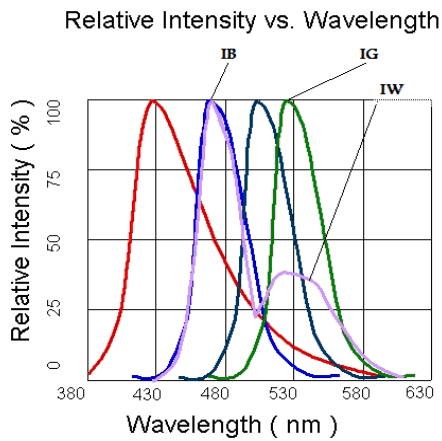
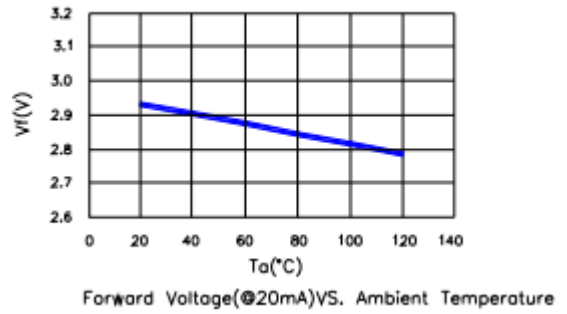
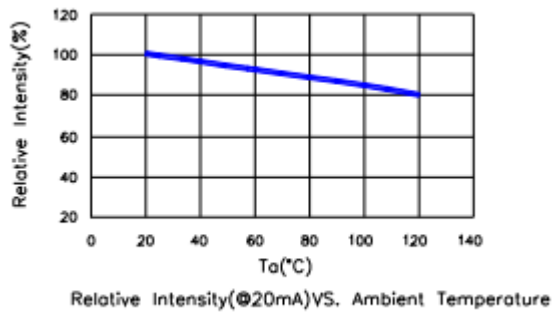
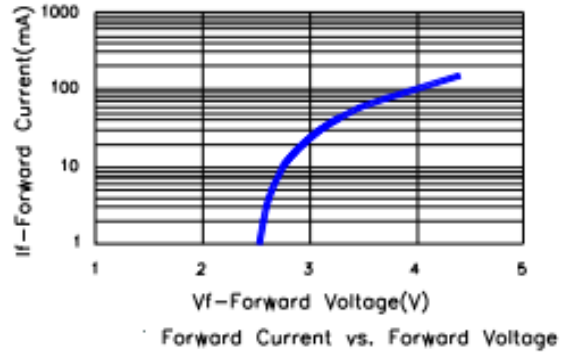
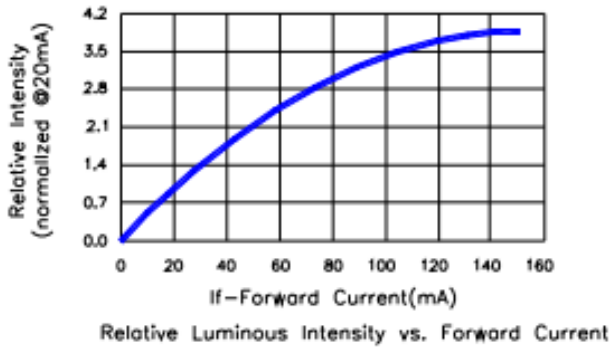


Characteristic Curves

AllnGaP

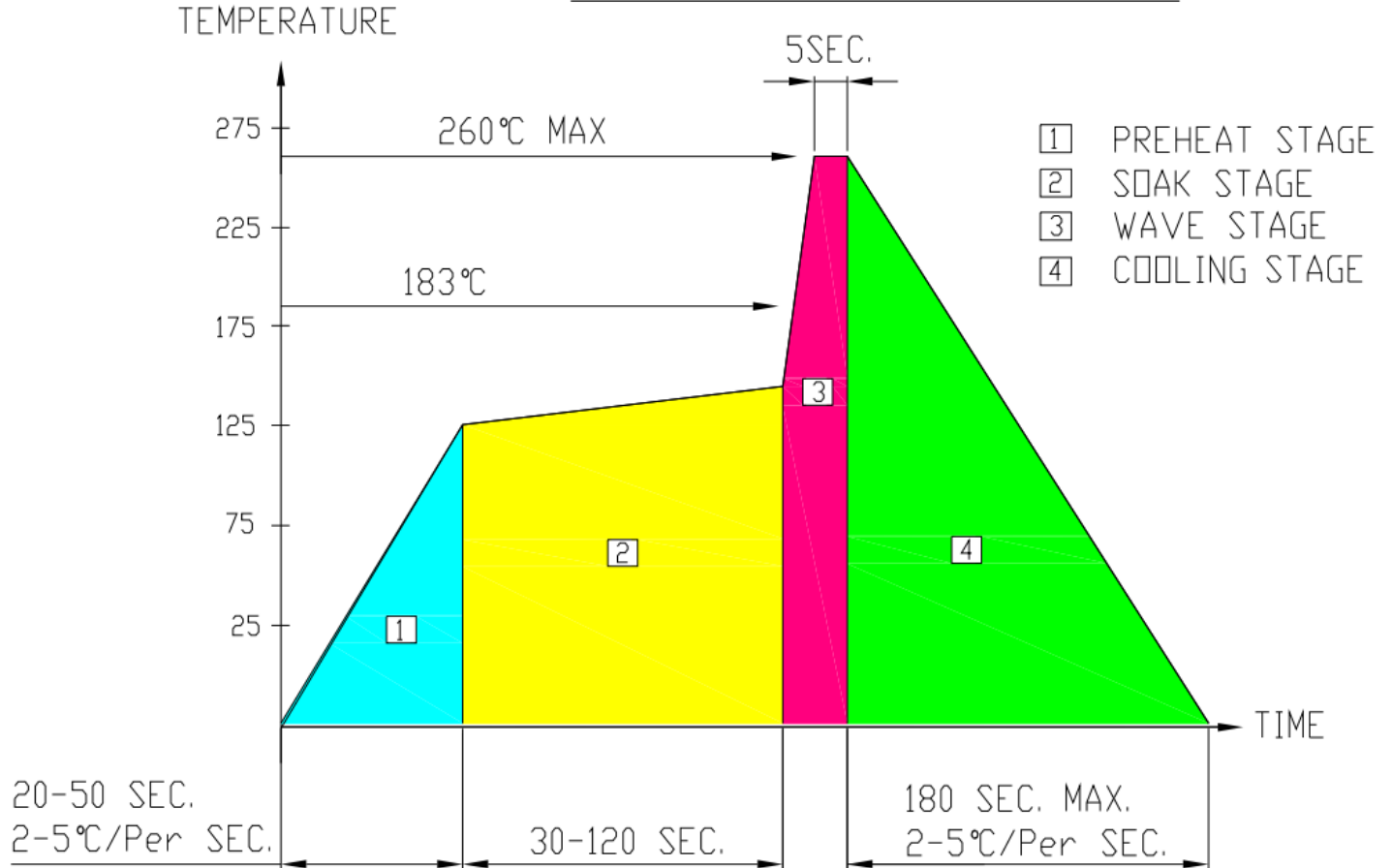


InGaN



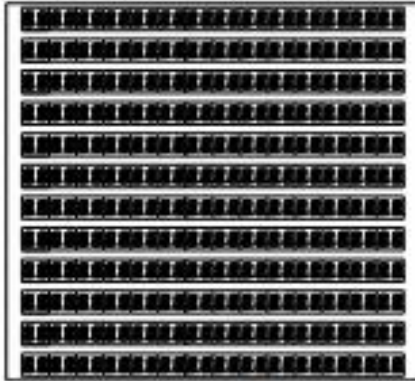
Solder Profile & Footprint

WAVE SOLDER PROFILE



Packing

168 PCS(14X12) / 1 PINK Polyform



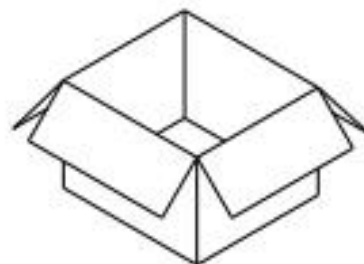
ESD BAG SIZE : 650 x 550 mm

6 Polyform / 1 PINK BAG



A reference for packing within ESD bag.

2016 PCS / 2 PINK BAG / 1 Outer Carton



OUTER BOX SIZE : 430 x 390 x 300 mm

**Ordering Information**

Product		Orderable Part #		Spec Range	Quantity per foam
CC	CA	CC	CA		
QBAD54R1	QBAD54R0	QBAD54R1	QBAD54R0	Iv=60mcd typ. @ 20mA, $\lambda_D=624\text{nm}$ typ.	168pcs
QBAD54S1	QBAD54S0	QBAD54S1	QBAD54S0	Iv=30mcd typ. @ 20mA, $\lambda_D=639\text{nm}$ typ.	168pcs
QBAD54O1	QBAD54O0	QBAD54O1	QBAD54O0	Iv=60mcd typ. @ 20mA, $\lambda_D=606\text{nm}$ typ.	168pcs
QBAD54Y1	QBAD54Y0	QBAD54Y1	QBAD54Y0	Iv=60mcd typ. @ 20mA, $\lambda_D=590\text{nm}$ typ.	168pcs
QBAD54AG1	QBAD54AG0	QBAD54AG1	QBAD54AG0	Iv=25mcd typ. @ 20mA, $\lambda_D=571\text{nm}$ typ.	168pcs
QBAD54IG1	QBAD54IG0	QBAD54IG1	QBAD54IG0	Iv=250mcd typ. @ 20mA, $\lambda_D=525\text{nm}$ typ.	168pcs
QBAD54IB1	QBAD54IB0	QBAD54IB1	QBAD54IB0	Iv=60mcd typ. @ 20mA, $\lambda_D=465\text{nm}$ typ.	168pcs



Revision History

Description:	Revision #	Revision Date
New Release of QBAD54XXZ_series	V1.0	02/01/2012
Update Spec and format	V2.0	10/30/2014
Add deep red options	V2.1	11/14/2014
Fix error on common anode P/N	V2.2	01/30/2015
Add packing spec	V2.3	10/01/2015
Spec update (wavelength and typ. Brightness)	V2.4	03/15/2021

Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.