

QT-Brightek SMD Display Series

0.56" Three Digit Display

Part No.: QBTS56ZXX

XX= Color

Z= 1: Common Cathode

Z = 0: Common Anode

Table of Contents

Introduction	3
Electrical / Optical Characteristic: (T=25 °C)	4
Absolute Maximum Rating	4
Pin Configuration	5
Characteristic Curves: (AlInGaP)	6
Solder Profile & Footprint	7
Packing & Labeling	8
Ordering Information	9
Revision History	10
Disclaimer	10

Product: QBTS56ZXX	Date: March 24, 2014	Page 2 of 10
	Version# 1.1	

Introduction

Feature:

- 0.56" Three digit seven segments display
- Low power consumption
- Packed in reel
- White segment and grey surface
- XX = color code
- X=1: Common Cathode or 0: Common Anode

Description:

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

Application:

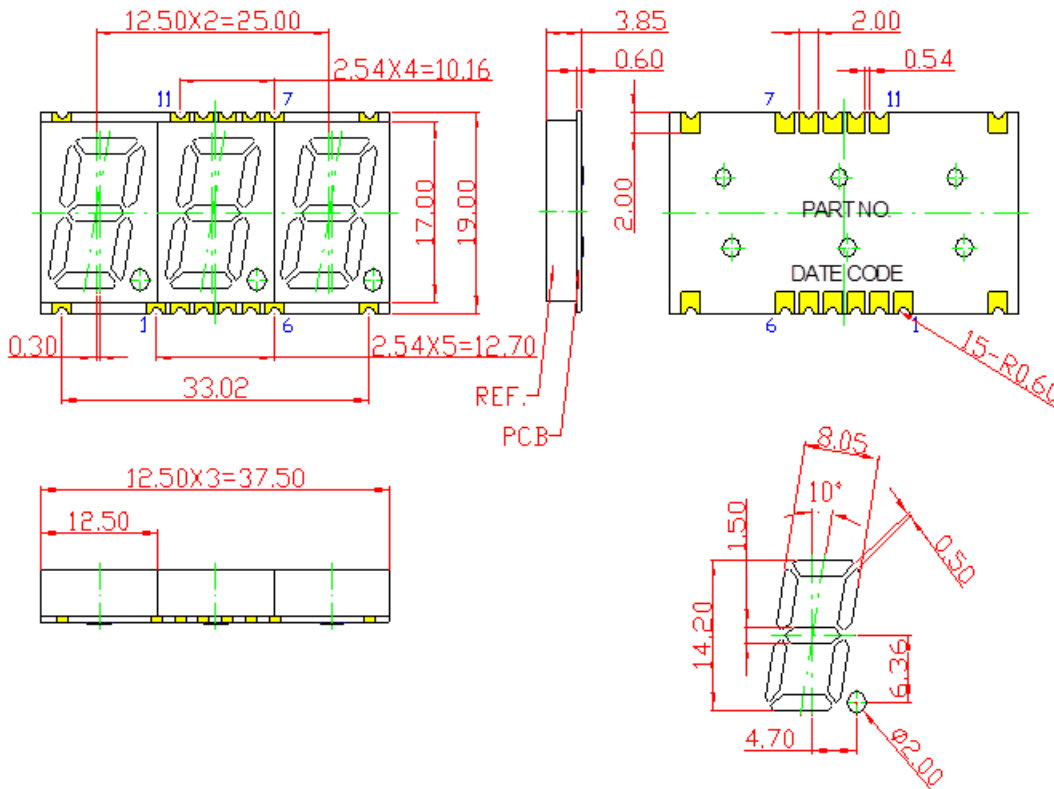
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

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.	Max.	Min.	Typ.	Max.	Typ.
QBTS561R	QBTS560R	AllnGaP	Red	20	2.0	2.6	--	625	--	25
QBTS561AG	QBTS560AG	AllnGaP	Yellow Green	20	2.0	2.6	--	570	--	10

Absolute Maximum Rating

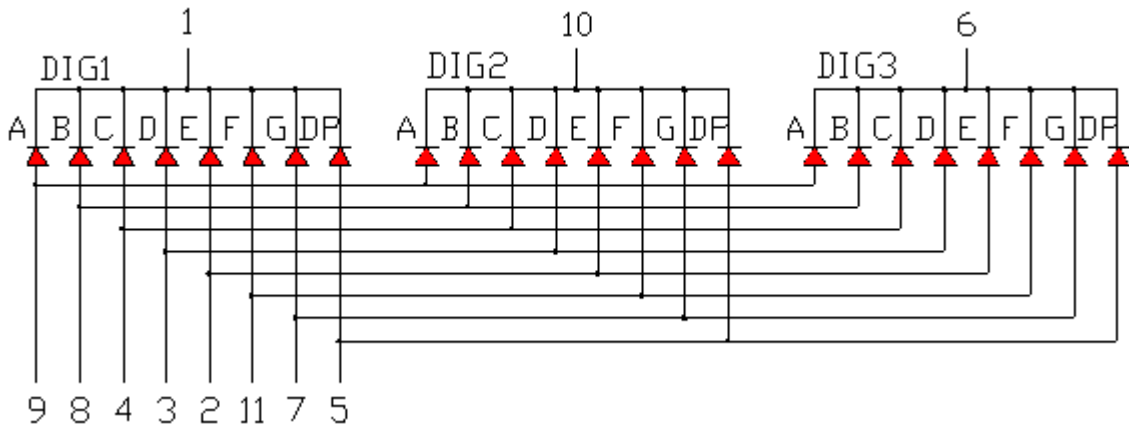
Material	P _d (mW)	Derating linear from 25C per dice (mW/C)	I _F (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
AllnGaP	70	0.28	25	5	-40 to + 105	-40 to +105	260

*Duty 1/10 @ 1KHz

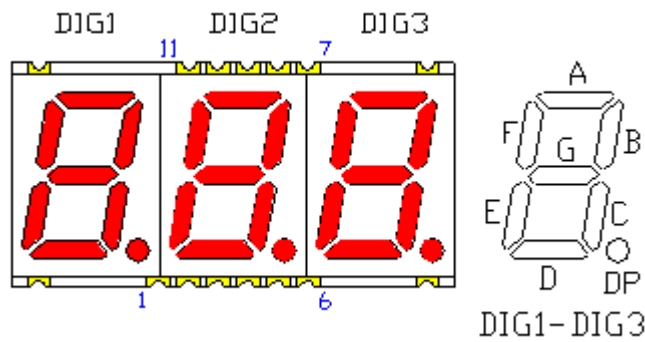
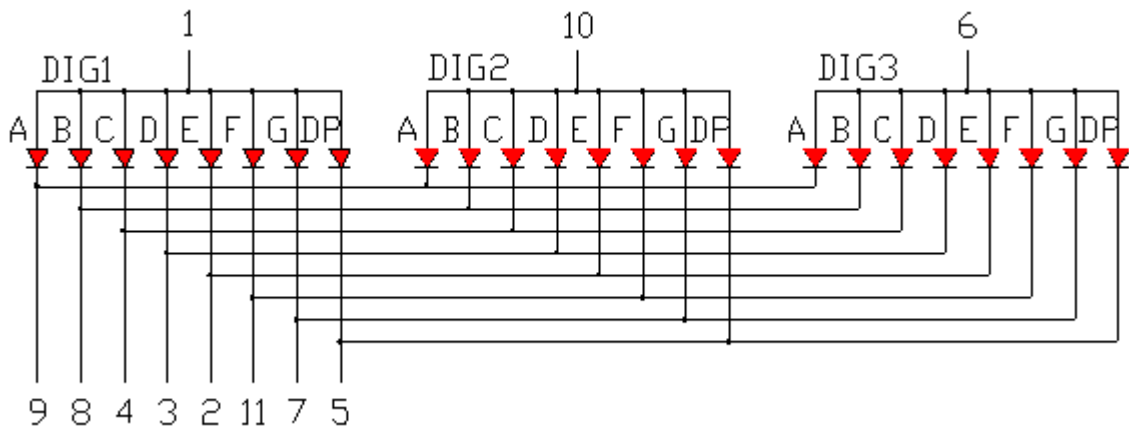
** IR Reflow for no more than 5 sec @ 260 °C

Pin Configuration

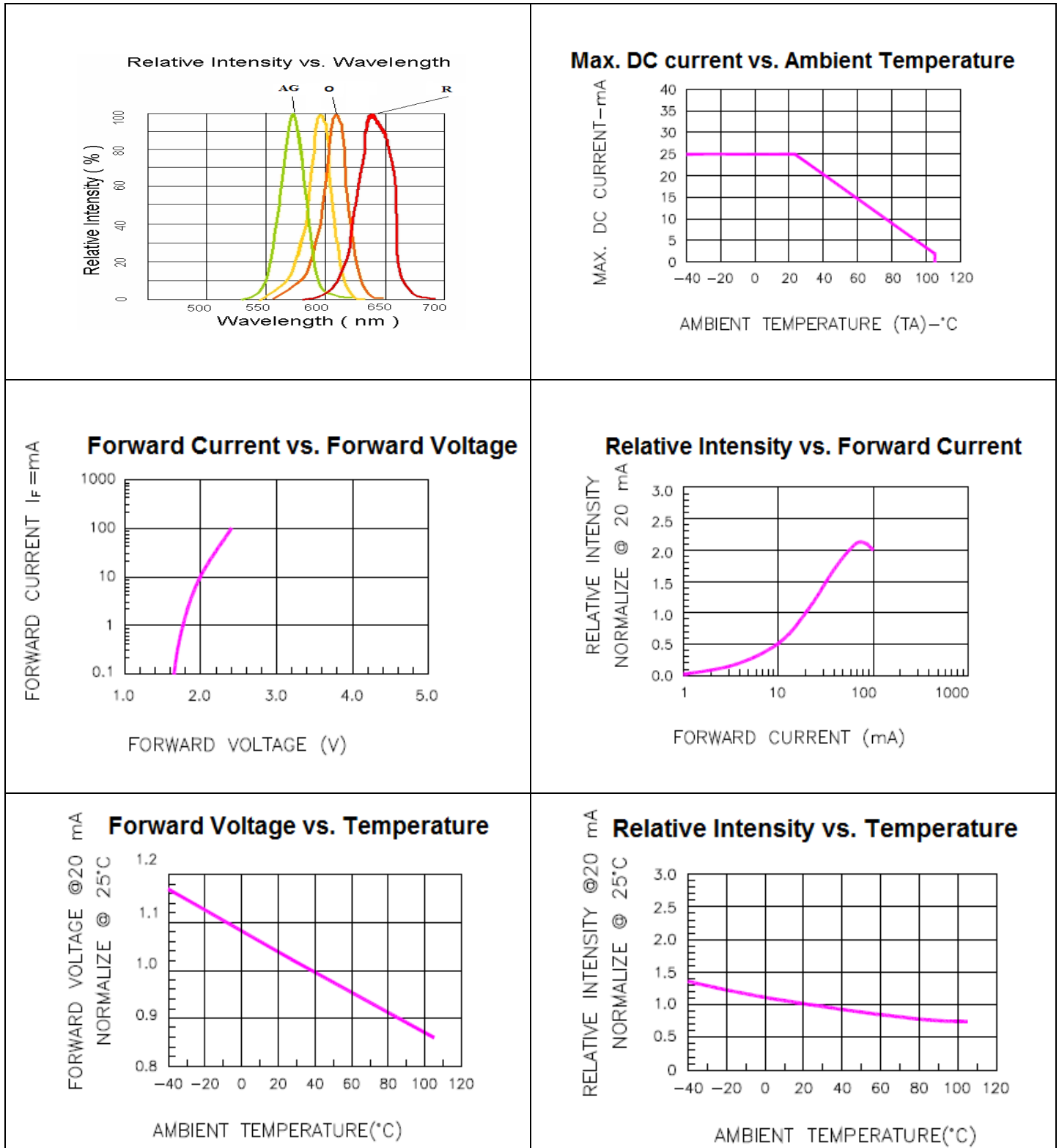
CC



CA



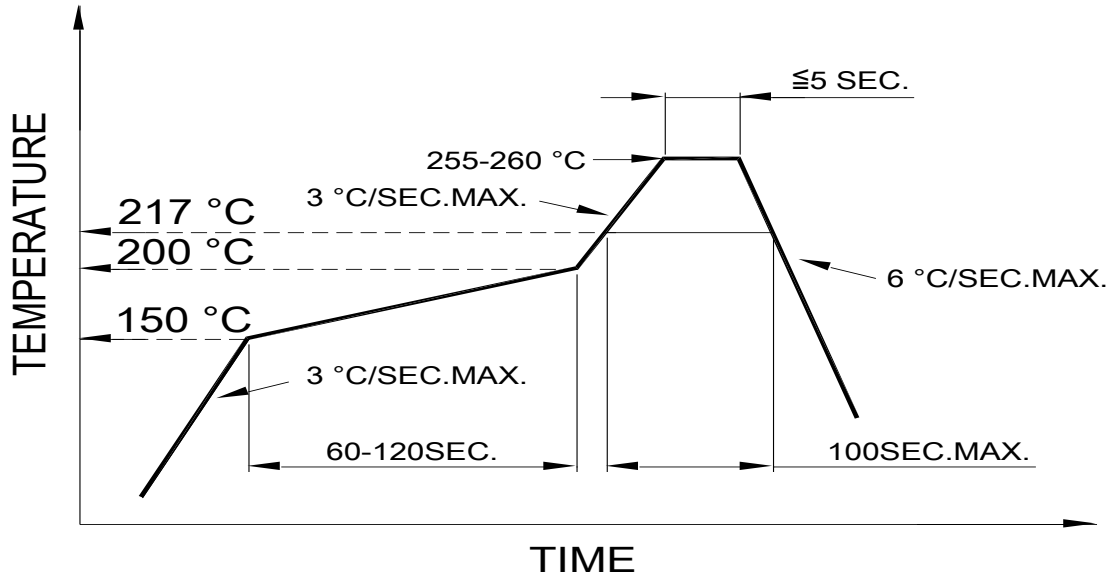
Characteristic Curves: (AlInGaP)



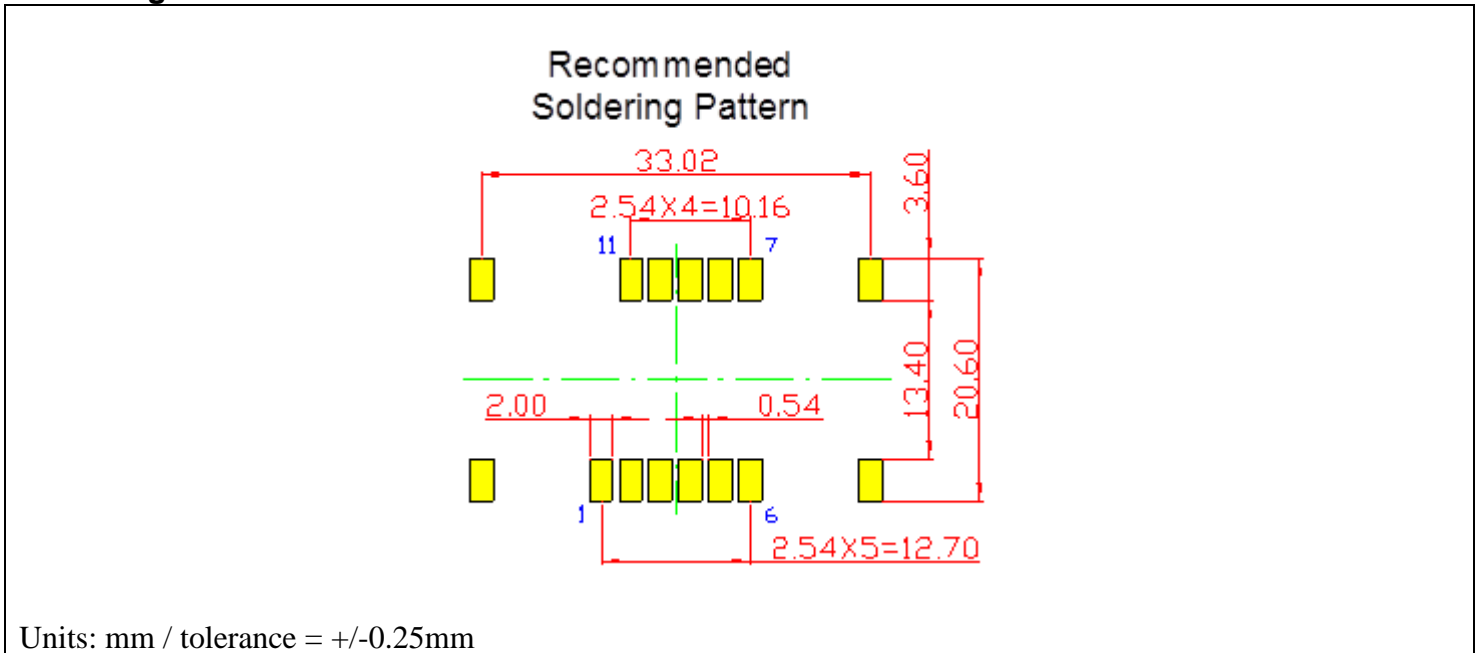
Solder Profile & Footprint

Lead-free Solder Profile:

Pb free reflow soldering Profile

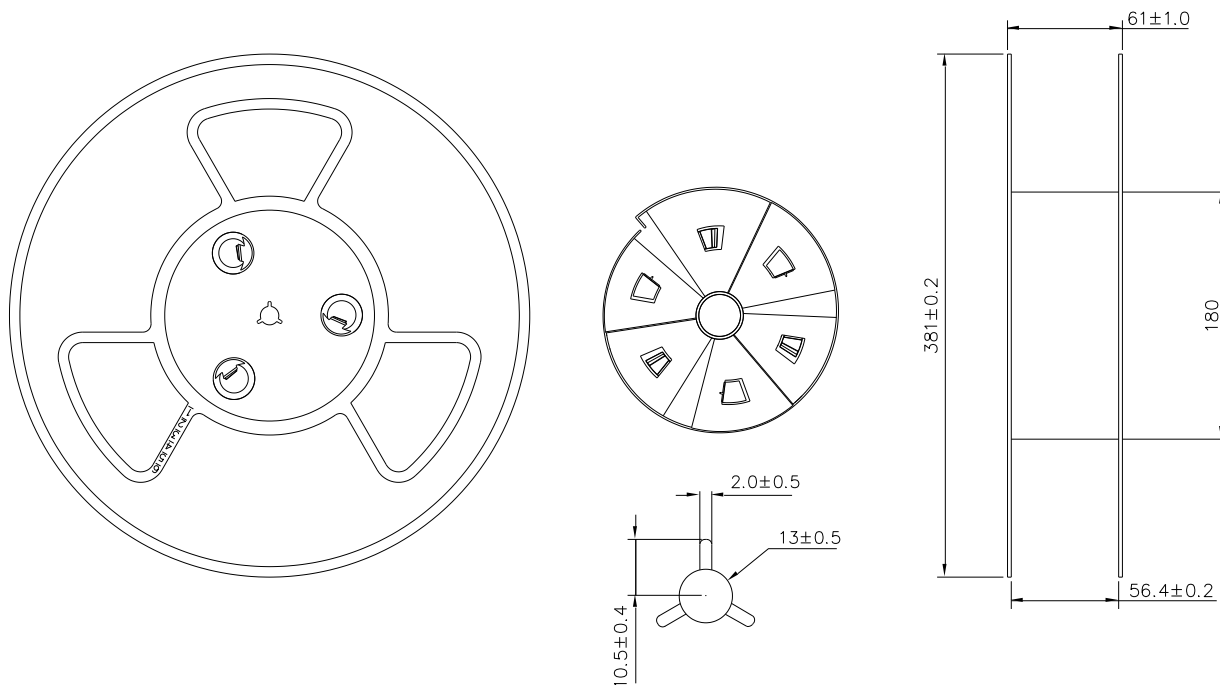


Soldering Profile:

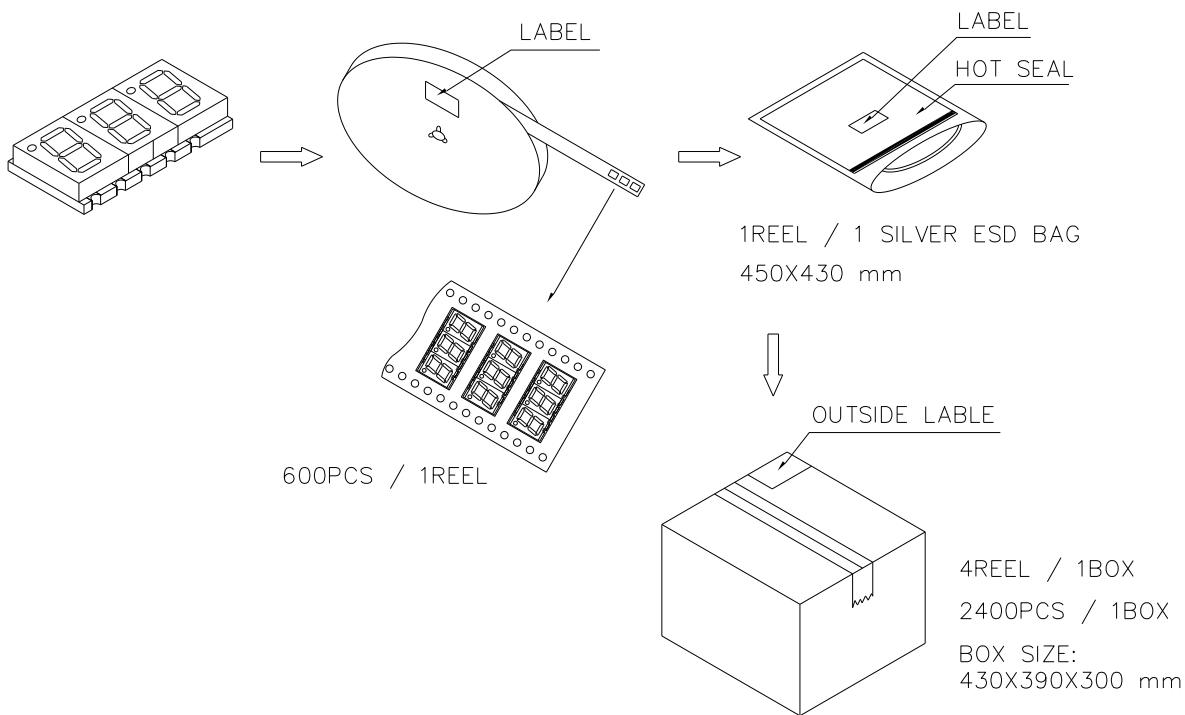


Packing & Labeling

Reel Dimension:



Packing:



Product: QBTS56ZXX	Date: March 24, 2014	Page 8 of 10
	Version# 1.1	



Part No: _____
 Customer P/N: _____
 Item: _____
 Q'ty: _____
 Vf: _____
 Iv: _____
 WI: _____
 Date: _____

Made in Taiwan

Ordering Information

Product		Orderable Part #		Spec Range	Quantity per Reel
CC	CA	CC	CA		
QBTS561R	QBTS560R	QBTS561R	QBTS560R	Iv=25 mcd Typ. @ I _F = 20mA/ Color: 625nm Typ.	600
QBTS561AG	QBTS560AG	QBTS561AG	QBTS560AG	Iv=10 mcd Typ. @ I _F = 20mA/ Color: 570nm Typ.	600

Revision History

Description:	Revision #	Revision Date
New Release of QBTS56ZXX	V1.0	06/24/2011
Amend format and optical spec/ Add packing spec	V1.1	03/24/2014

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

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.

Product: QBTS56ZXX	Date: March 24, 2014	Page 10 of 10
	Version# 1.1	