



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
ACSC08-51QBWA/D	Blue (InGaN)	White Diffused	3600	8700	Common Cathode, Rt. Hand Decimal.

Notes:

- Luminous intensity/ luminous Flux: +/-15%.
- Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	460		nm	IF=10mA
λ_D [1]	Dominant Wavelength	Blue	465		nm	IF=10mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	IF=10mA
C	Capacitance	Blue	100		pF	Vf=0V;f=1MHz
Vf [2]	Forward Voltage	Blue	3	4.0	V	IF=10mA
IR	Reverse Current	Blue		50	uA	VR=5V

Notes:

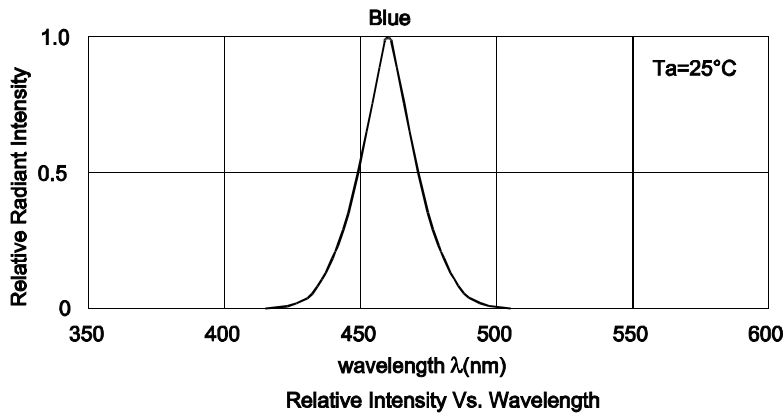
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
- Wavelength value is traceable to the CIE127-2007 compliant national standards.
- Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Electrostatic Discharge Threshold (HBM)	250	V
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

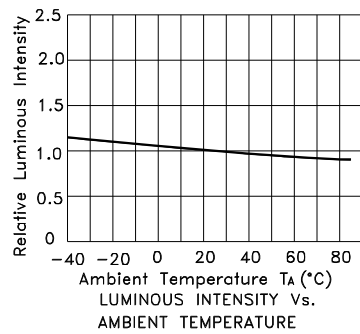
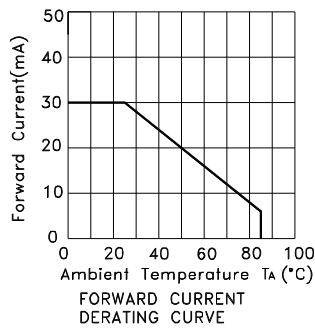
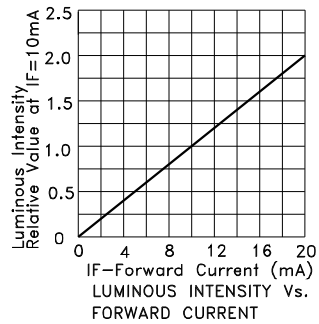
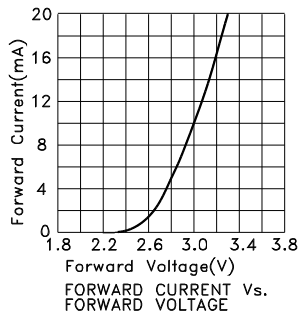
Note:

- 1/10 Duty Cycle, 0.1ms Pulse Width.



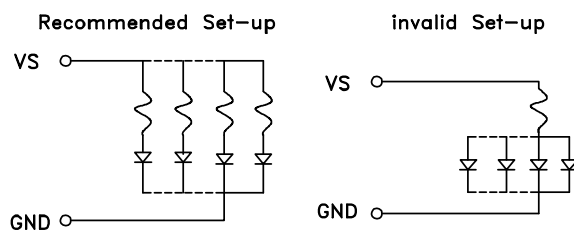
Blue

ACSC08-51QBWA/D



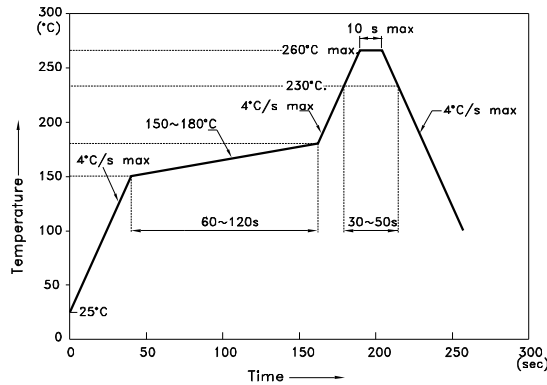
CIRCUIT DESIGN NOTES

1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



ACSC08-51QBWA/D

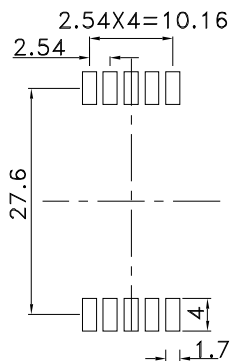
Reflow Soldering Profile For Lead-free SMT Process.



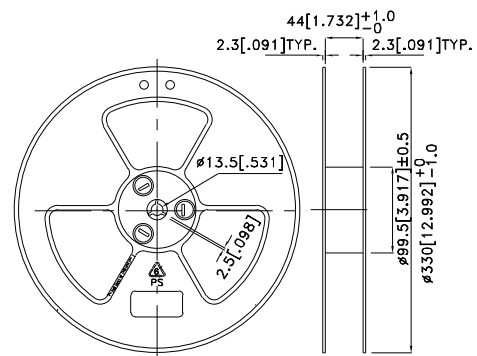
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

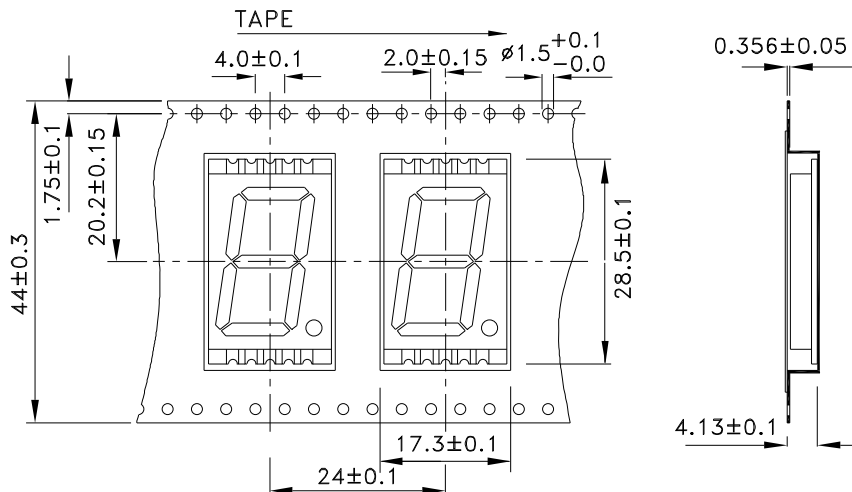
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



Reel Dimension

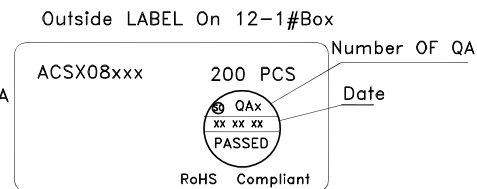
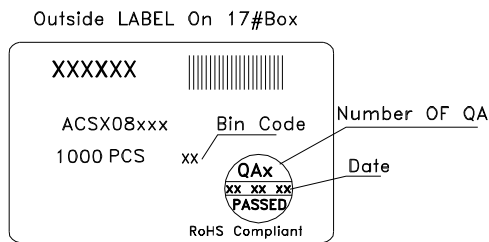
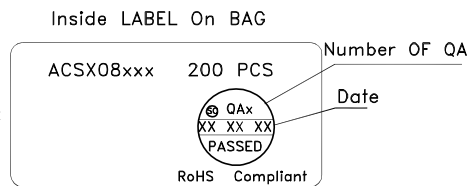
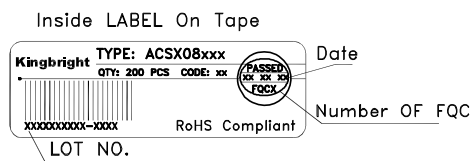
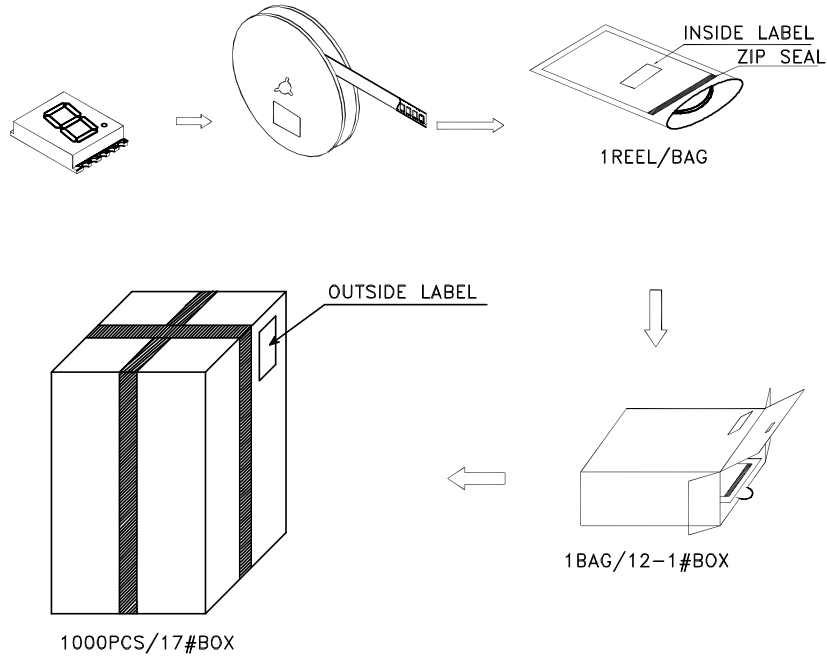


Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

ACSC08-51QBWA/D



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