



# PRODUCT SPECIFICATION

**Model No : CSQ-2842B7/2841B7**

## Descriptions:

- 0.28 Inch Quad Digit Display
- CSQ-2842: Common Anode
- CSQ-2841: Common Cathode
- Emitting Color: Super Bright Blue



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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**Model No : CSQ-2842/2841B7**

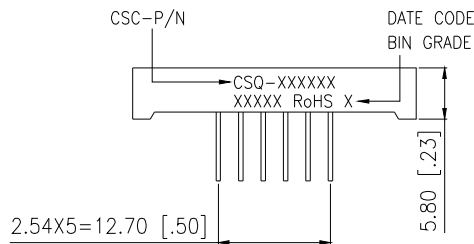
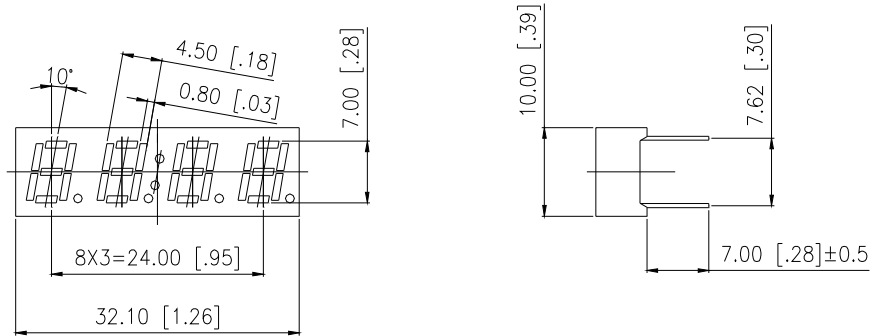
**Features -**

1. 0.28 inch (7.0mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Part No.	Chip		Description
	Material	Emitted Color	
CSQ-2842B7	InGaN	Super Bright Blue	Common Anode
CSQ-2841B7	InGaN	Super Bright Blue	Common Cathode

**Package Dimensions -**



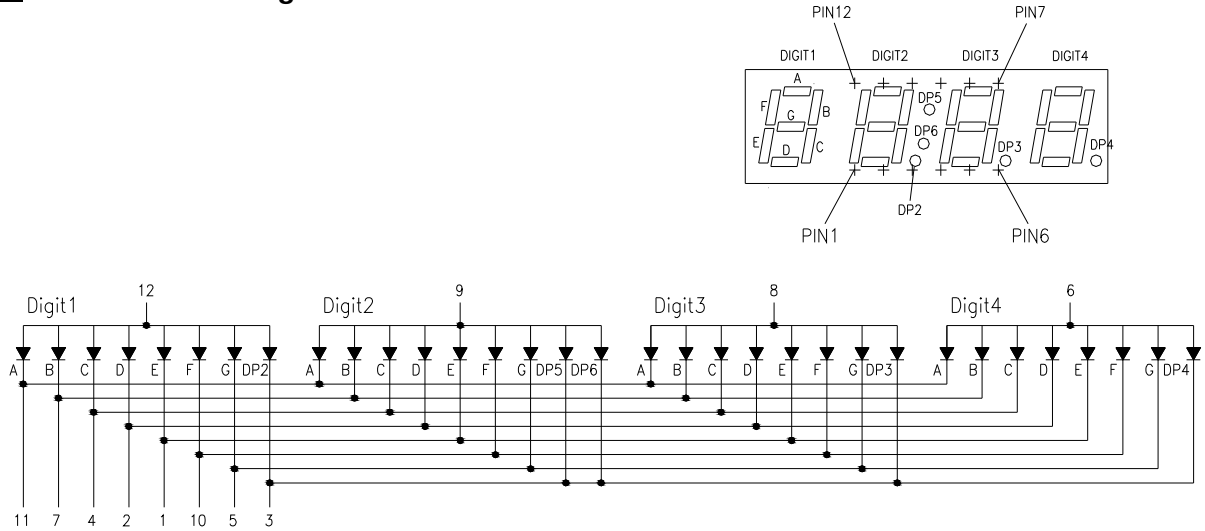
**NOTE:**

1. All pins are  $\phi 0.45$  [.02"].
2. Dimension in millimeter (inch), and tolerance is  $\pm 0.25$  [.01] unless otherwise noted.



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Internal Circuit Diagrams -



CSQ-2842 Common Anode  
(CSQ-2841 Common Cathode)

Absolute Maximum Rating -

( $T_a=25^{\circ}\text{C}$ )

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>P<sub>AD</sub></b>	120	mW
Continuous Forward Current Per Dice	<b>I<sub>AF</sub></b>	30	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	<b>I<sub>PF</sub></b>	100	mA
Derating Linear From 25°C Per Dice	-	0.4	mA/°C
Reverse Voltage Per Dice	<b>V<sub>R</sub></b>	5	V
Operating Temp.	<b>T<sub>opr</sub></b>	-35 ~ +85	°C
Storage Temp.	<b>T<sub>stg</sub></b>	-35 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			



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■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	$V_F$	-	3.5	4	V	$I_F=20mA$
Luminous Intensity Per Segment	$I_v$	5	12	-	mcd	$I_F=10mA$
Peak Emission Wavelength	$\lambda_p$	-	468	-	nm	$I_F=20mA$
Dominant Wavelength	$\lambda_d$	-	470	-	nm	$I_F=20mA$
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	30	-	nm	$I_F=20mA$
Reverse Current	$I_R$	-	-	100	$\mu A$	$V_R=5V$
Luminous Intensity Matching Ratio	$I_V-m$	-	-	2:1	-	$I_F=10mA$





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**Typical Electrical / Optical Characteristics Curves -**

**(Ta = 25°C Unless Otherwise Noted)**

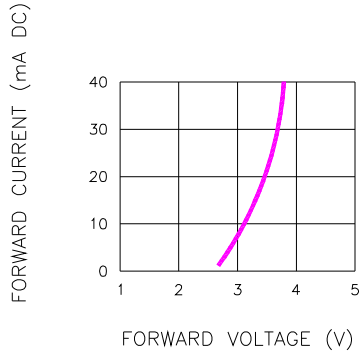


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

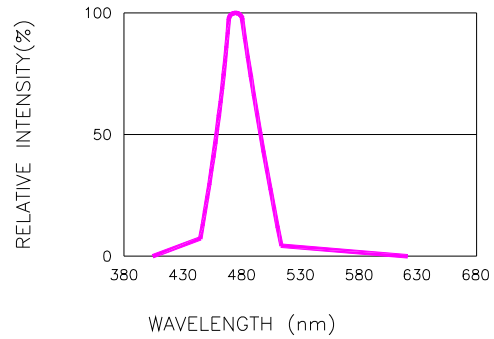


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

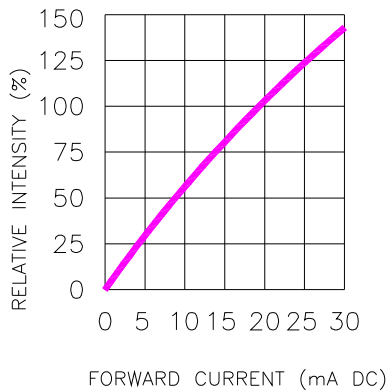


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

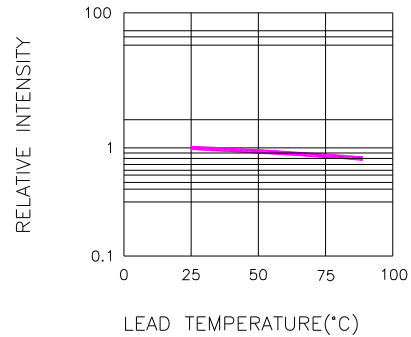


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

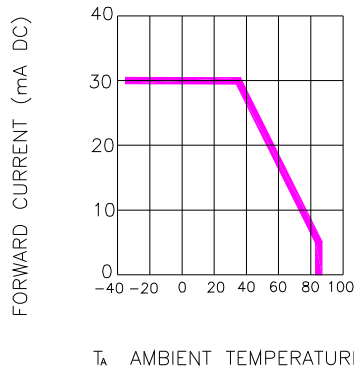


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

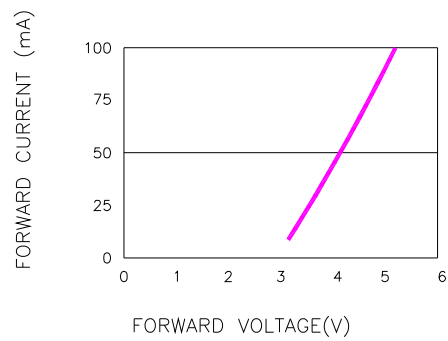


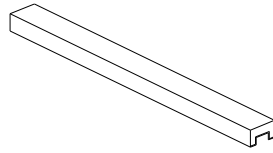
Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD(100us TEST PULSE, 1% DUTY CYCLE)



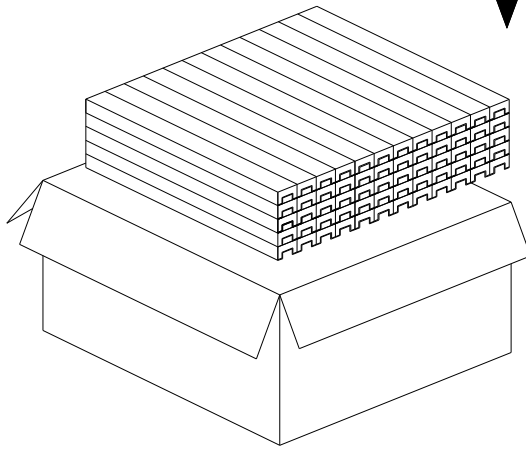
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■ Package Dimensions

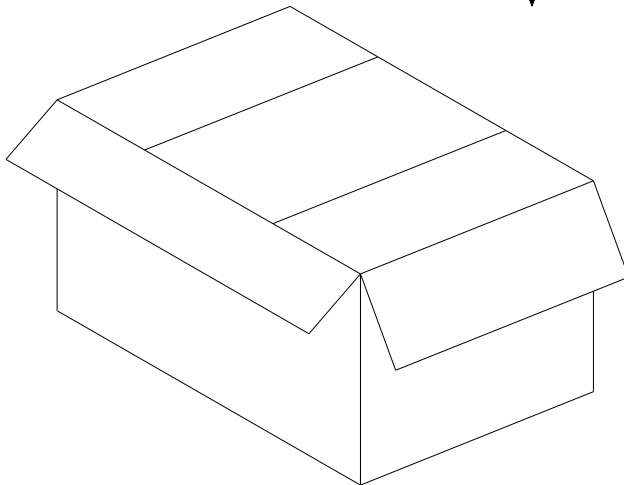
CSQ-284XX  
Quad Digit Display  
Dice Code



15 Pcs Per Tube



90 Tubes Per Inner Box  
Total Q'TY: 1350 Pcs



3 Inner Boxes Per Carton.  
Total Q'TY: 4050 Pcs

Carton Size:  
L540\*W485\*H305.5 mm