CHINA
SEMICONDUCTOR
CORPORATION

Spec. No.	PS-ND-08072511
Rev.	A

PRODUCT SPECIFICATION

Model No：CST-432B7/431B7

Descriptions:

- 0.4 Inch Triad Digits Display
- CST-432: Common Anode
- CST-431: Common Cathode
- Emitting Color：Super Bright Blue

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No：CST-432/431B7

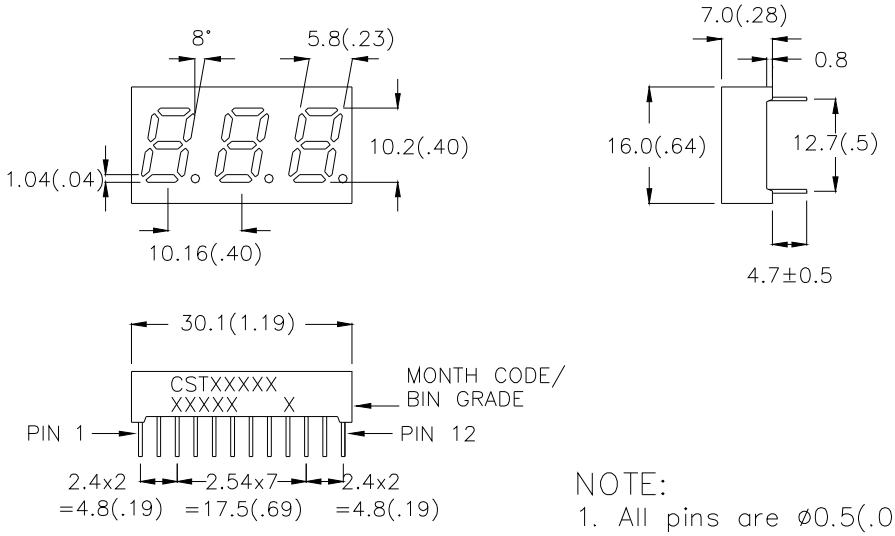
■ Features -

1. 0.4 inch (10.2mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. ESD > 1KV(HBM)
6. Easy mounting on P.C. board or socket.

■ Device Selection Guide -

Part No.	Chip		Description
	Material	Emitted Color	
CST-432B7	InGaN	Super Bright Blue	Common Anode
CST-431B7	InGaN	Super Bright Blue	Common Cathode

■ Package Dimensions -



NOTE:
1. All pins are ø0.5(.02).
2. Dimension in millimeter (inch), and tolerance is ±0.25 (.01) unless otherwise noted.

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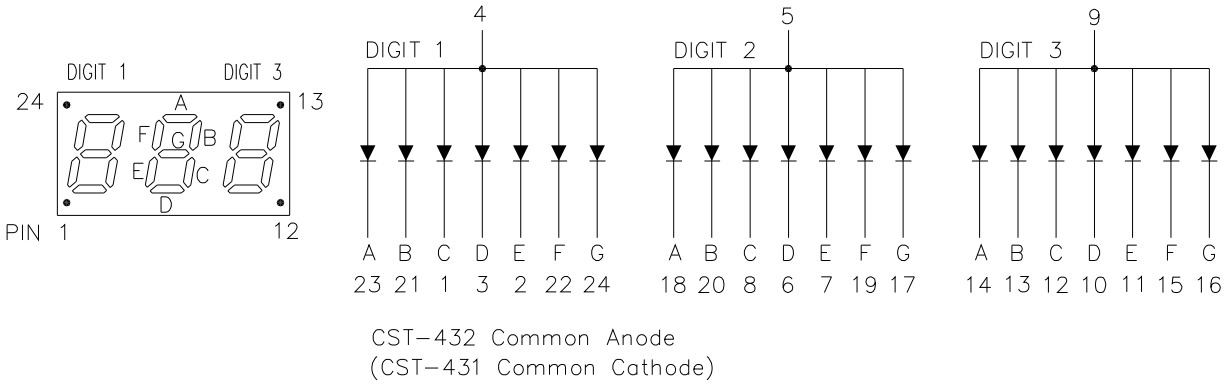
■ Internal Circuit Diagrams -



CST-432 Common Anode
(CST-431 Common Cathode)

■ Absolute Maximum Rating -

(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P_{AD}	120	mW
Continuous Forward Current Per Dice	I_{AF}	30	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	I_{PF}	100	mA
Derating Linear From 25℃ Per Dice	-	0.4	mA/℃
Reverse Voltage Per Dice	V_R	5	V
Operating Temp.	Topr	-35 ~ +85	℃
Storage Temp.	Tstg	-35 ~ +85	℃
Solder temperature 1/16 inch below seating plane for 3 seconds at 260℃			

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■ Electro-optical Characteristics -

(Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	V_F	-	3.5	4	V	I_F=20mA
Luminous Intensity Per Segment	Iv	-	15	-	mcd	I_F=10mA
Peak Emission Wavelength	λp	-	468	-	nm	I_F=20mA
Dominant Wavelength	λd	-	470	-	nm	I_F=20mA
Spectrum Radiation Bandwidth	Δλ	-	30	-	nm	I_F=20mA
Reverse Current	IR	-	-	100	μA	V_R=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	I_F=10mA

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■ Typical Electrical / Optical Charateristics Curves -

(Ta = 25℃ Unless Otherwise Noted)

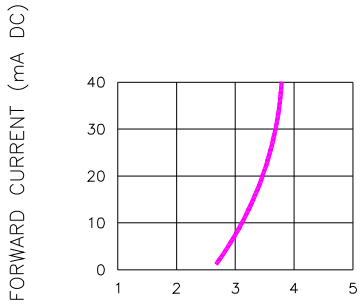


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

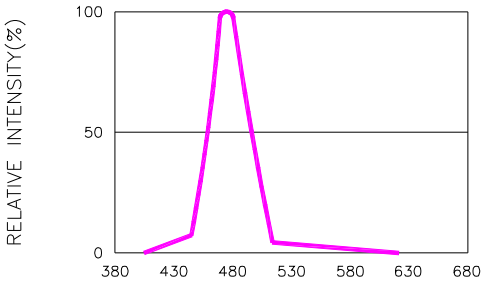


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

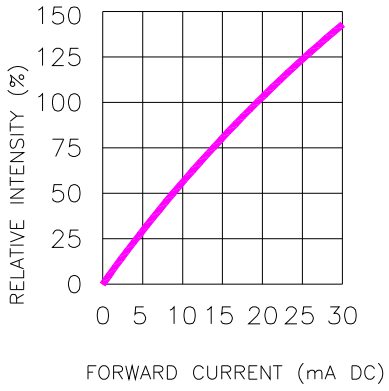


Fig.3 RELATIVE INTENSITY
VS. FORWARD CURRENT

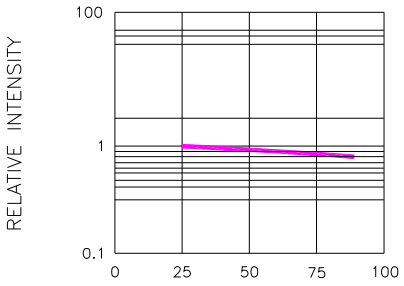


Fig.4 RELATIVE INTENSITY VS.LEAD TEMPERATURE
(PULSED 20 mA; 300us
PULSE,10ms PERIOD)

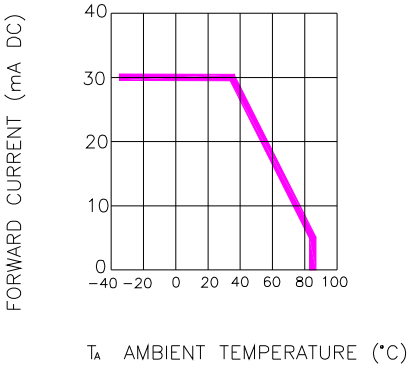


Fig.5 FORWARD CURRENT
VS. AMBIENT TEMPERATURE

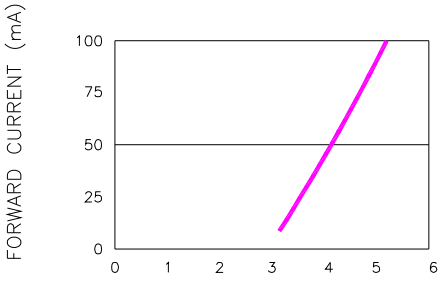
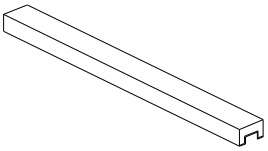


Fig.6 PEAK FORWARD VOLTAGE
VS.FORWARD(100us TEST PULSE,
1% DUTY CYCLE)

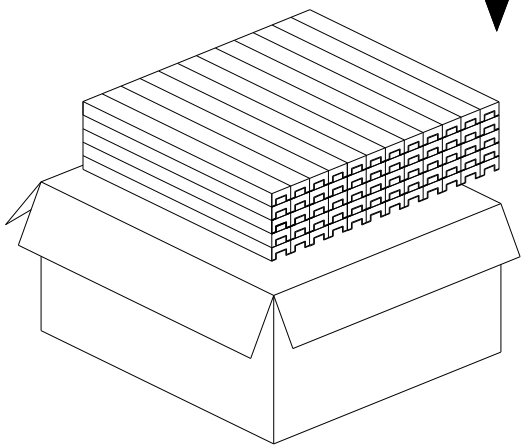
Model No：CST-432/431B7

■ Package Dimensions

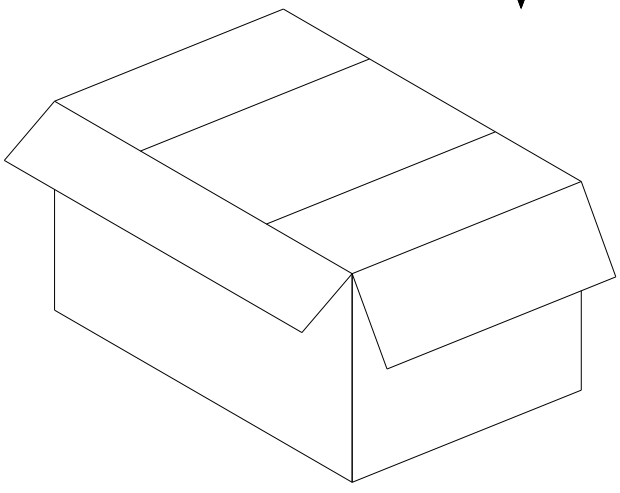




16 Pcs Per Tube



65 Tubes Per Inner Box
Total Q'TY: 1040 Pcs



3 Inner Boxes Per Carton.

Total Q'TY: 3120 Pcs

Carton Size:
L540*W485*H305.5 mm

Note: The specifications are subject to change without notice. Please contact us for updated information.