

PRODUCT SPECIFICATION

Model No.: CSOD-S20240 CSOD-S20241

Descriptions:
<ul style="list-style-type: none"> ■ 0.20 Inch Dual Digit Display ■ CSOD-S20240 is Common Anode ■ CSOD-S20241 is Common Cathode ■ Emitting Color: Blue ■ Standard: -11: Gray face, white segment. -21: Black face, white segment.



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

OPTO PLUS TECHNOLOGIES CO.,LTD
 Address:No.696,Yangming North Rd,
 ShaoXing City,ZheJiang Province, P.R.China.
 Tel :86-575-88623888
 Fax:86-575-88623112

Model No.: CSOD-S20240 CSOD-S20241

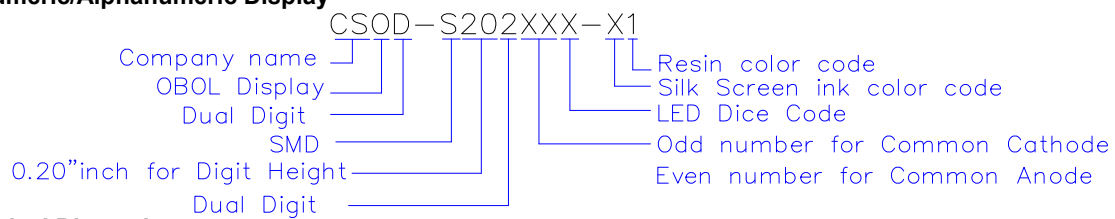
■ Features -

1. 0.2 inch (5.08mm) digit height
2. Qualified according to JEDEC moisture sensitivity Level 2a.
3. RoHS compliant.
4. Low power consumption.
5. Easy mounting on P.C. board .

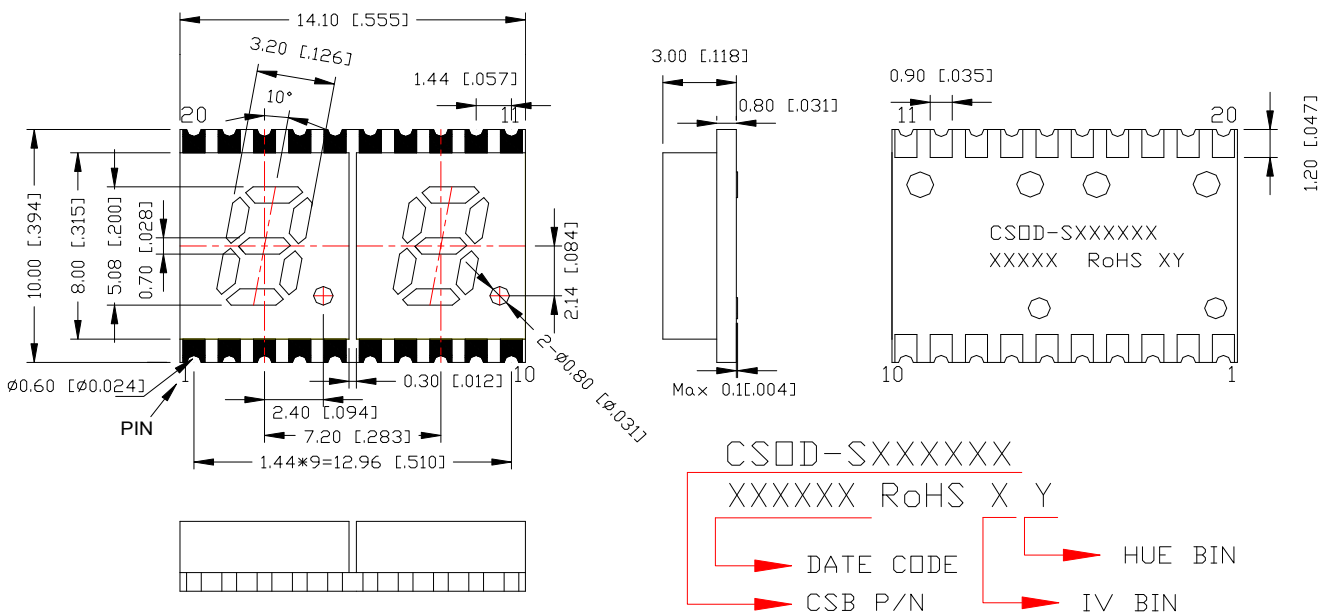
■ Device Selection Guide -

Model No.	Chip	
	Material	Emitting Color
CSOD-S2024xB	InGaN	Blue

■ LED Numeric/Alphanumeric Display



■ Mechanical Dimensions -

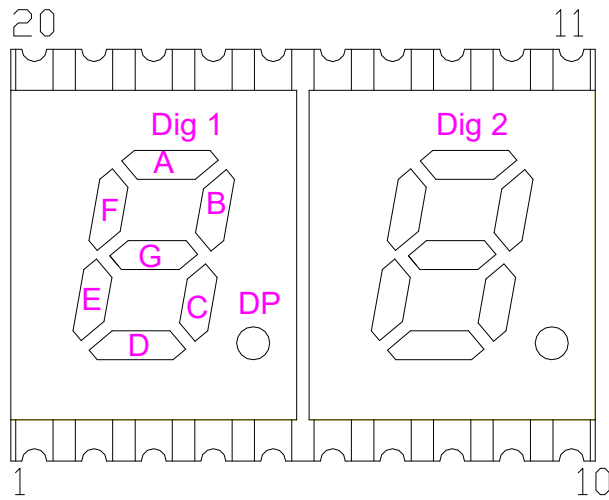


Notes:

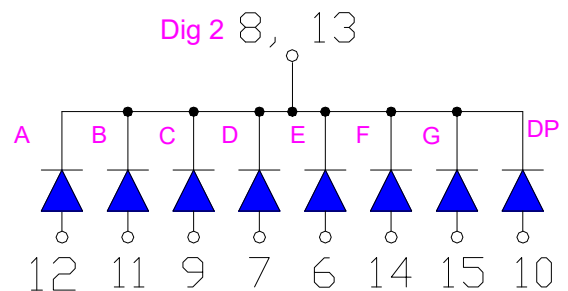
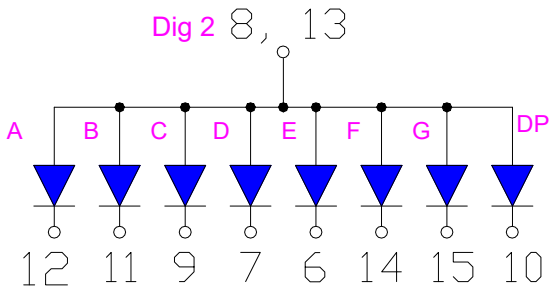
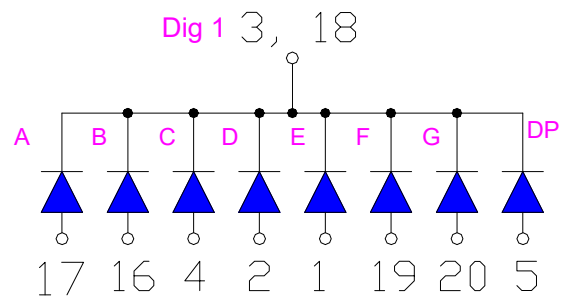
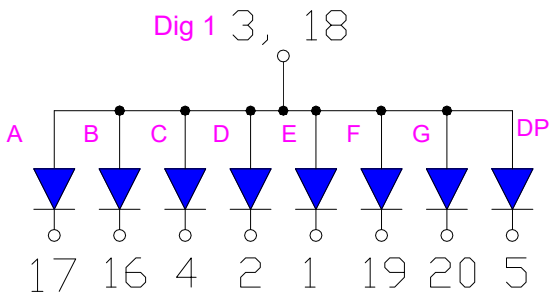
1. Dimension in millimeter [inch], tolerance is ± 0.25 [.010] and angle is $\pm 1^\circ$ unless otherwise noted.
2. Bending \leq Length*1%.

Model No.: CSOD-S20240 CSOD-S20241

■ All Light On Segments Feature & Pin Position



■ Internal Circuit Diagrams -



CSOD-S20240 is Common Anode

CSOD-S20241 is Common Cathode

Model No.: CSOD-S20240 CSOD-S20241

■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	PAD	114	mW
Derating Liner from 25°C per Dice	-	0.4	mA/°C
Continuous Forward Current Per Dice	IAF	30	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	IPF	100	mA
Reverse Voltage Per Dice	VR	5	V
Electrostatic discharge(HBM)	ESD	1000	V
Operating Temp.	Topr	-40 ~ +105	°C
Storage Temp.	Tstg	-40 ~ +105	°C

■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	VF	-	3.2	3.8	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	11	-	mcd	IF=10mA
Dominant Wavelength	λd	-	465	-	nm	IF=20mA
Reverse Current	IR	-	-	50	μ A	VR=5V
Luminous Intensity Matching Ratio	Iv-m	-	-	2:1	-	IF=10mA

Notes:The device can not operated under continuous reverse voltage.

■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

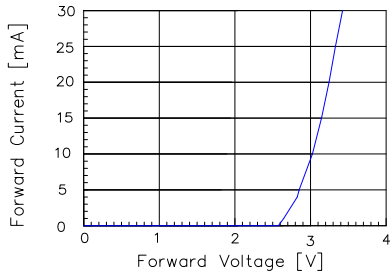


Fig 1. Forward Current vs. Forward Voltage

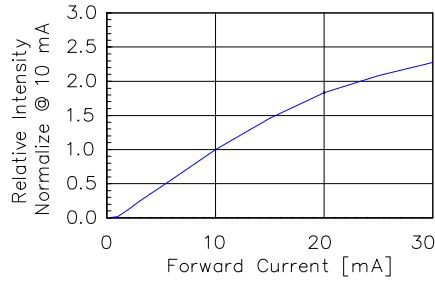


Fig 2. Relative Intensity vs. Forward Current

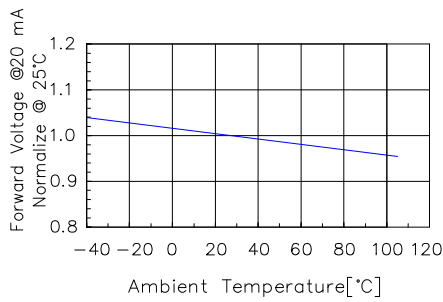


Fig 3. Forward Voltage vs. Temperature

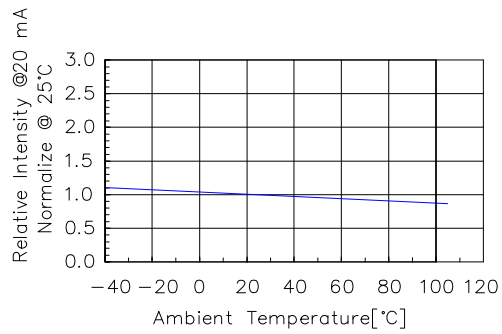


Fig 4. Relative Intensity vs. Temperature

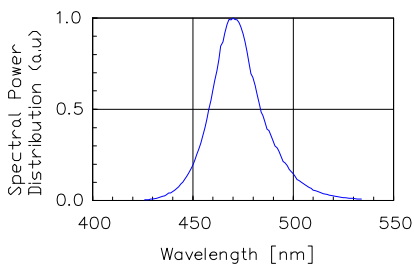


Fig 5. Spectral Power Distribution vs. Wavelength

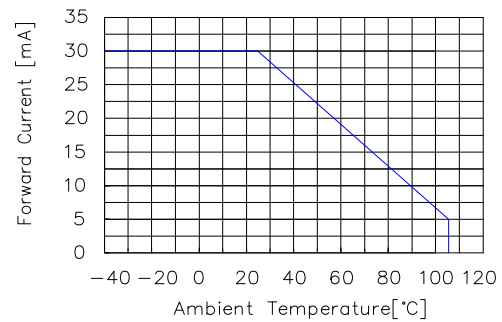
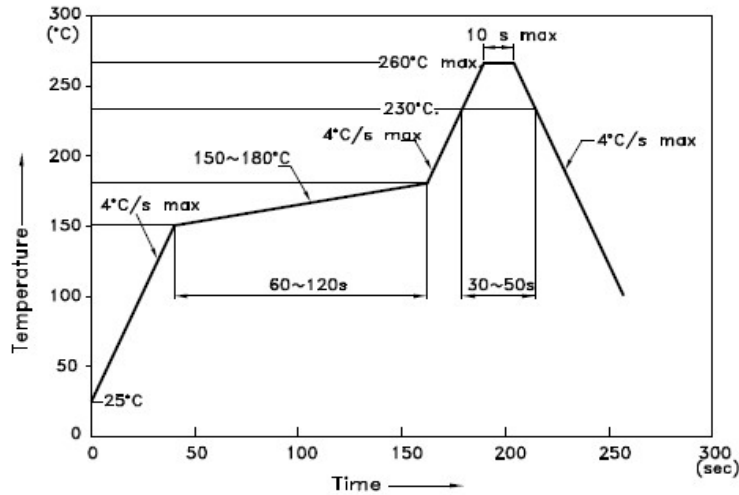


Fig 6. Forward current vs. Temperature

Model No.: CSOD-S20240 CSOD-S20241

SMT REFLOW SOLDERING INSTRUCTIONS

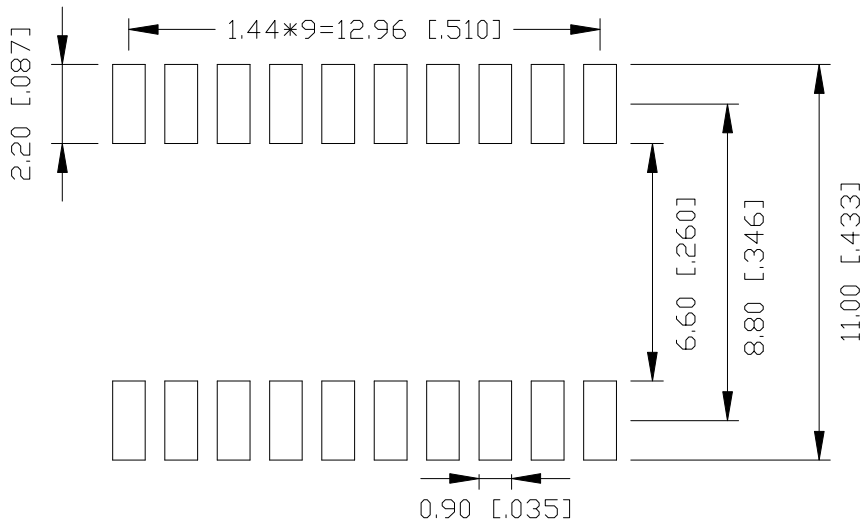
■ IR Reflow Temperature / Time :



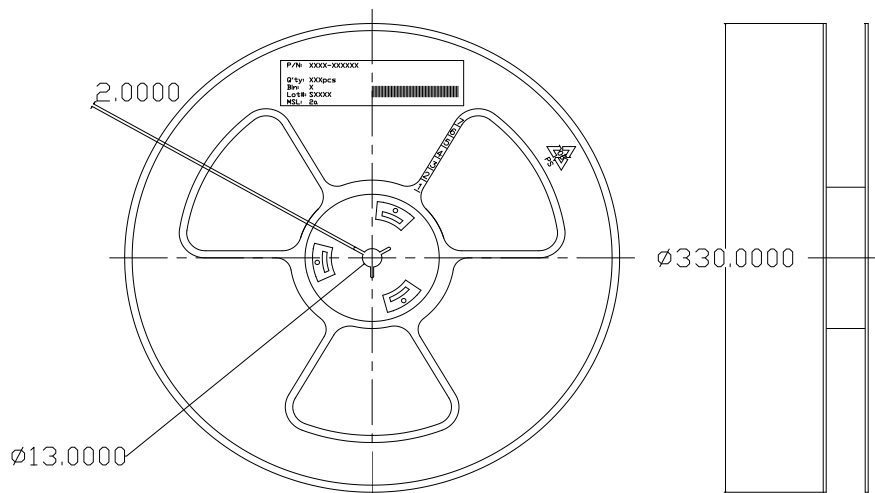
NOTES:

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.

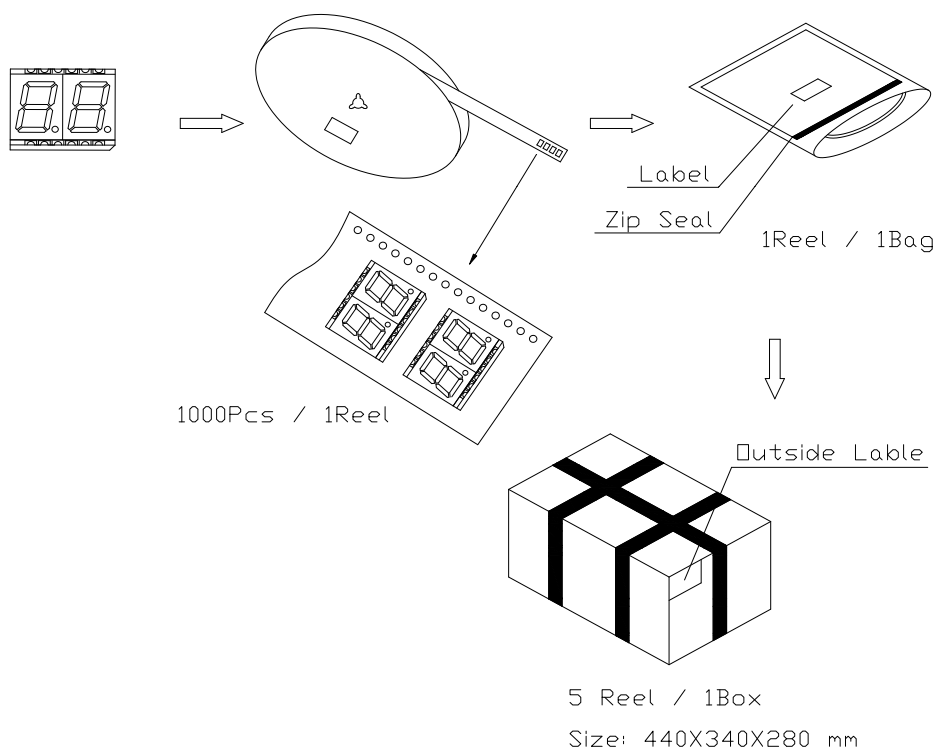
■ Soldering Pad Size



■ REEL DIMENSIONS



■ PACKING & LABEL SPECIFICATIONS



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