CHINA
SEMICONDUCTOR
CORPORATION

Spec. No	PS-ND-08070506
Rev.	A

PRODUCT SPECIFICATION

Model No：CSD-322E/323E

Descriptions:

- 0.3 Inch Dual Digits Display
- CSD-322: Common Anode
- CSD-323: Common Cathode
- Emitting Color：Orange

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No：CSD-322/323E

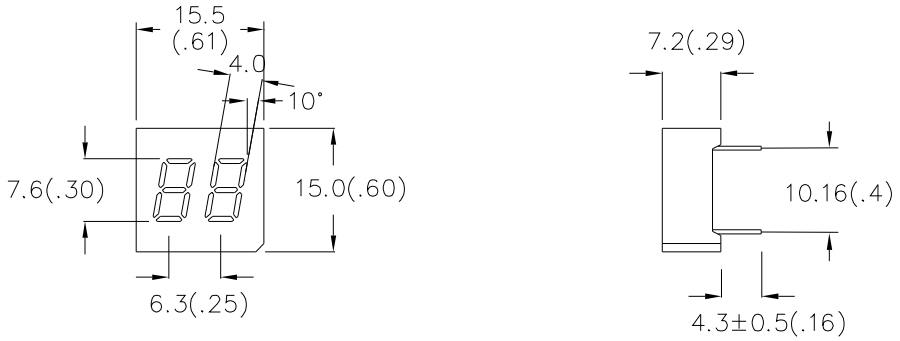
■ Features -

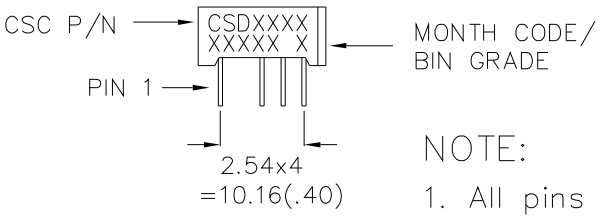
1. 0.3 inch (7.2mm) dight height.
2. Case mold type.
3. RoHs compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

■ Device Selection Guide -

Part No.	Chip		Description
	Material	Emitted Color	
CSD-322E	GaAsP	Orange	Common Anode
CSD-323E	GaAsP	Orange	Common Cathode

■ Package Dimensions -



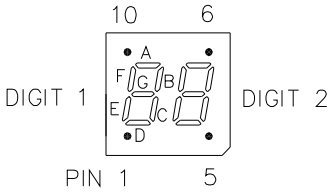


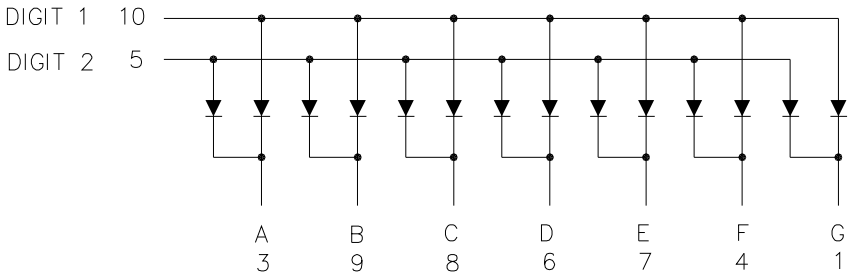
NOTE:

1. All pins are ø0.5(.023).
2. Dimension in millimeter (inch), and tolerance is ±0.25 (.01) unless otherwise noted.

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■ Internal Circuit Diagrams -





CSD-322 Common Anode.(CSD-323 is Common Cathode.)
No. 2 No Pin.

■ Absolute Maximum Rating -

(Ta=25℃)

Parameter	Symbo	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	I_{AF}	25	mA
Peak Current Per Dice	I_{PF}	90	mA
Derating Linear From 25℃ Per Dice	-	0.33	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	-	2.1	2.8	V	I_F=20mA
Luminous Intensity Per Segment	Iv	-	3000	-	ucd	I_F=10mA
Peak Emission Wavelength	λp	-	632	-	nm	I_F=20mA
Dominant Wavelength	λd	-	624	-	nm	I_F=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	35	-	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)

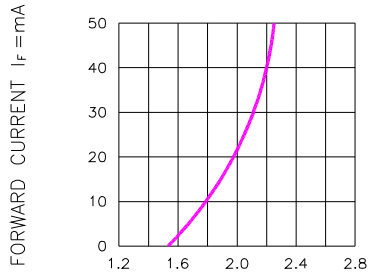


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

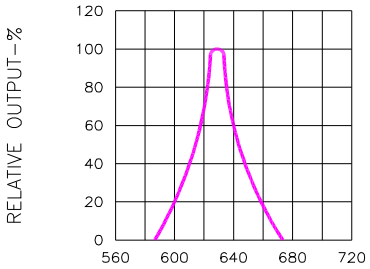


Fig.2 SPECTRAL RESPONSE

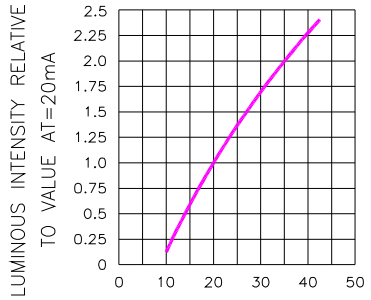


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

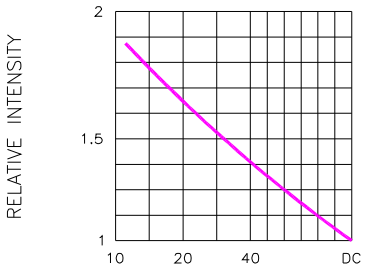


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

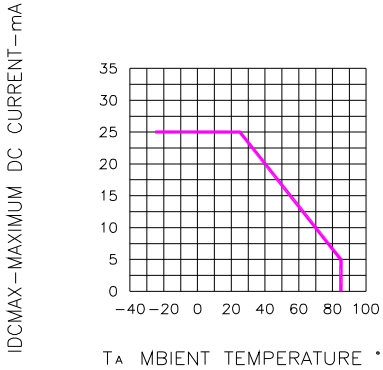


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

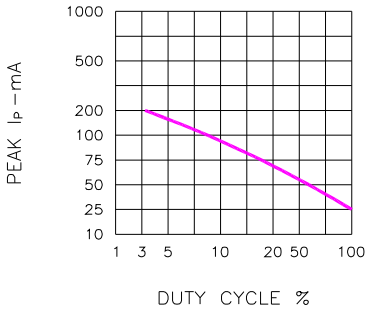


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)