



PRODUCT SPECIFICATION

Model No : CSD-528S/529S

Descriptions:

- 0.5 Inch Dual Digits Display
- CSD-528: Common Anode
- CSD-529: Common Cathode
- Emitting Color: Super Bright Red



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No : CSD-528/529S

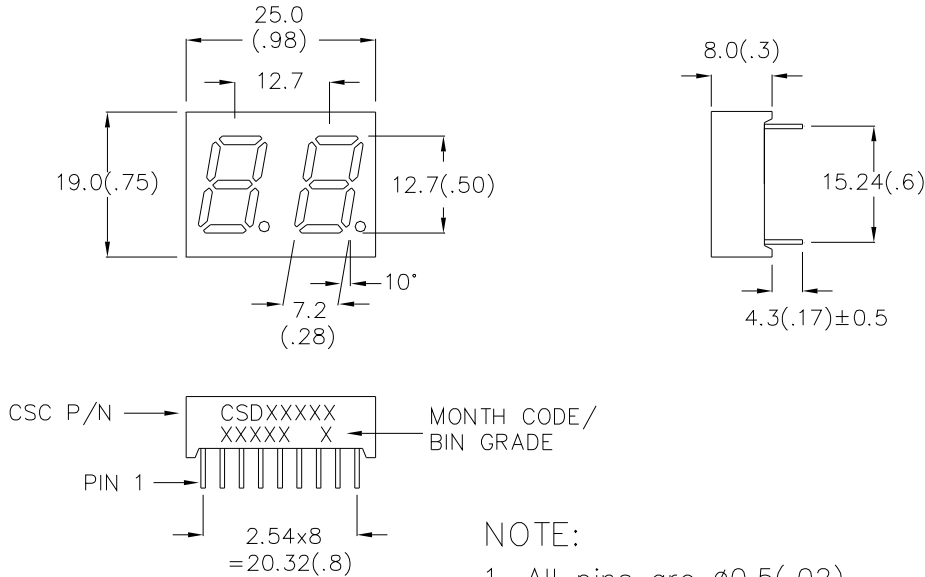
Features -

1. 0.5 inch (12.7mm) 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-528S	AlGaAs	Super Bright Red	Common Anode
CSD-529S	AlGaAs	Super Bright Red	Common Cathode

Package Dimensions -



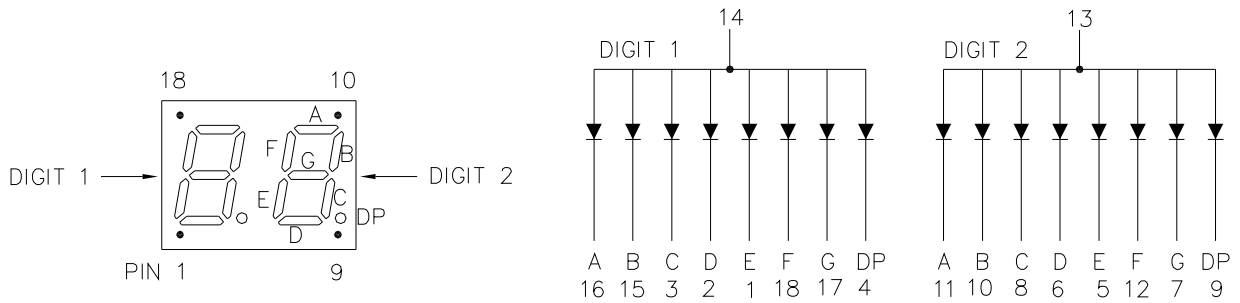
NOTE:

1. All pins are $\phi 0.5(.02)$
2. Dimension in millimeter (inch), and tolerance is $\pm 0.25 (.01)$ unless otherwise noted.



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Internal Circuit Diagrams -



CSD-528 Common Anode.
(CSD-529 is Common Cathode.)

Absolute Maximum Rating -

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

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	I_{AF}	30	mA
Peak Current Per Dice	I_{PF}	120	mA
Derating Linear From 25°C Per Dice	-	0.42	mA/°C
Reverse Voltage Per Dice	V_R	5	V
Operating Temp.	T_{opr}	-35 ~ +85	°C
Storage Temp.	T_{stg}	-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	-	1.8	2.5	V	I _F =20mA
Luminous Intensity Per Segment	I _v	-	5	-	mcd	I _F =10mA
Peak Emission Wavelength	λ _p	-	660	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	643	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	I _F =20mA
Reverse Current	I _R	-	-	100	μA	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)

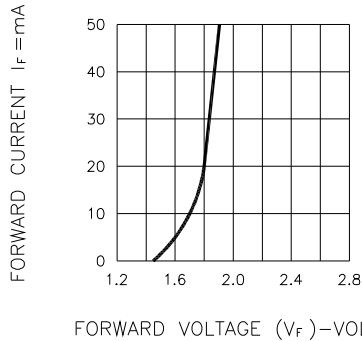


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

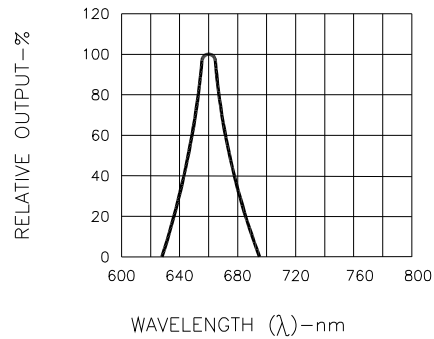


Fig.2 SPECTRAL RESPONSE

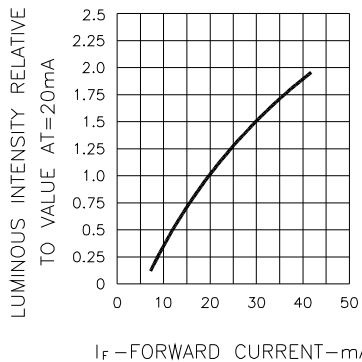


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

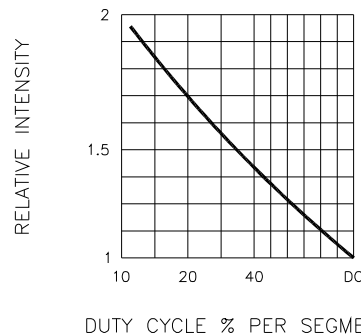


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

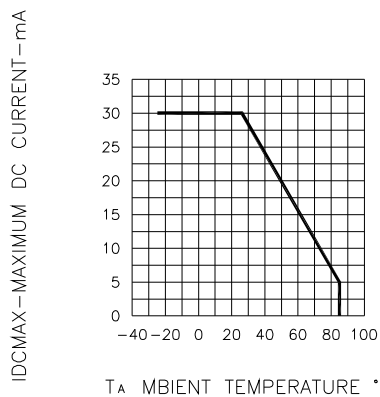


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

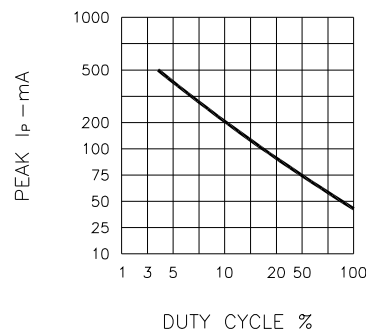


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)