



PRODUCT SPECIFICATION

CSS-1214D-21

Descriptions:

- 1.2 Inch Single Digit Display
- Common Anode
- Emitting Color: Super-Bright Red (DH)
- Black Face
- White Segment



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			

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Model No: CSS-1214D-21

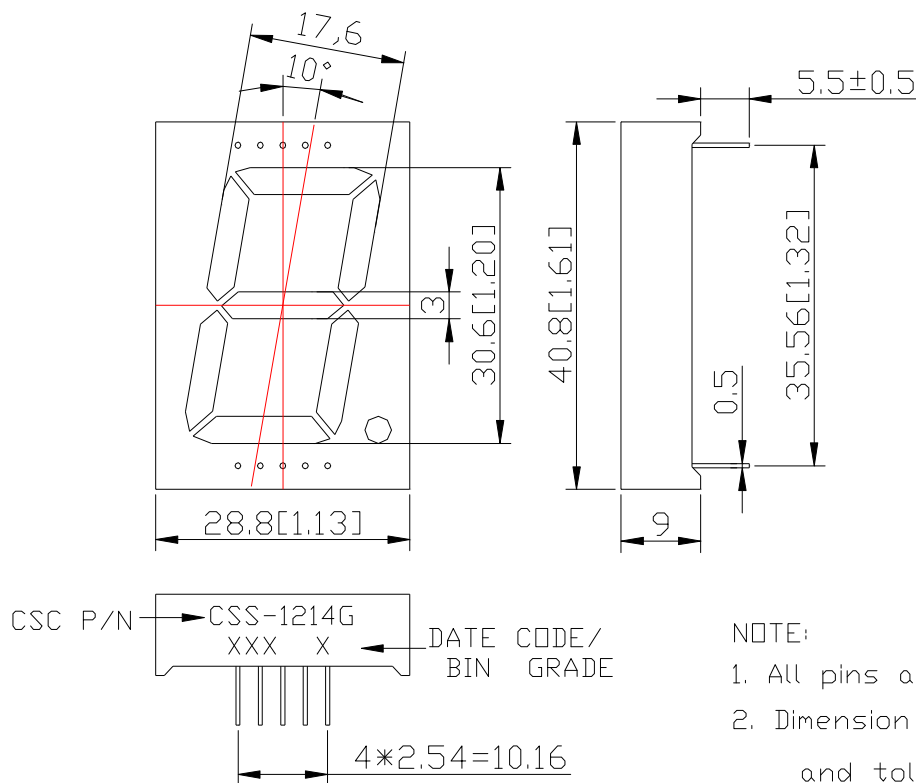
Features -

1. 1.2 inch (30.6mm) 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 -

Model No.	Chip		Face / Segment
	Material	Emitted Color	
CSS-1214D	AlGaAs	Super-Bright Red	Black / White

Mechanical Dimensions -

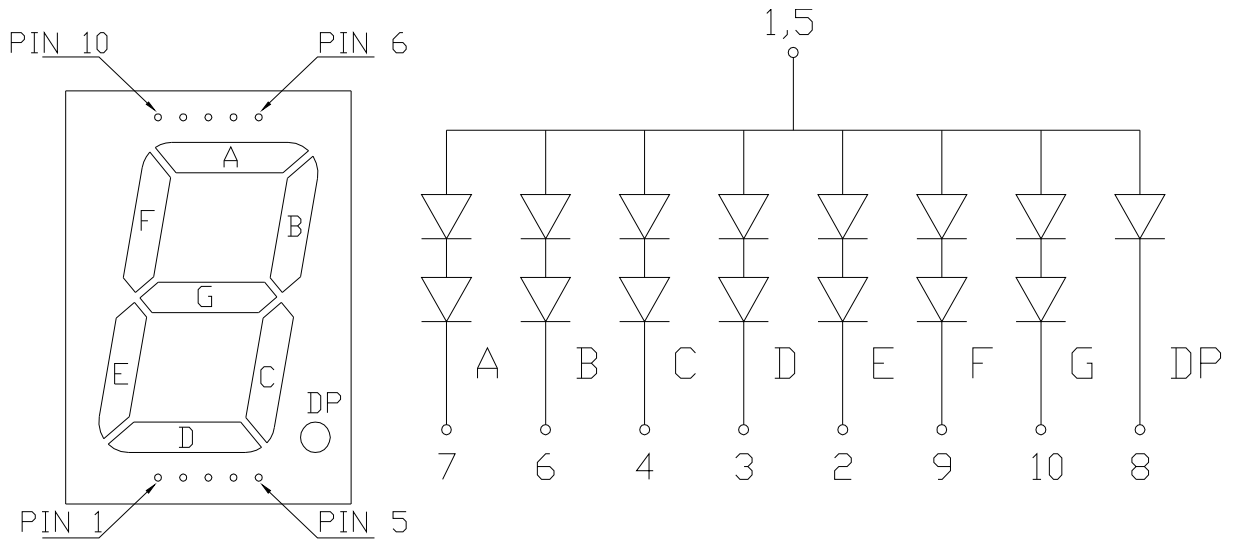


NOTE:
 1. All pins are $\varnothing 0.5\text{mm}$
 2. Dimension in millimeter (inch),
 and tolerance is ± 0.25 (.01)
 unless otherwise noted.



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Internal Circuit Diagrams -



Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	IAF	30	mA
Peak Current Per Dice (duty cycle 1/10,1KHz)	IPF	125	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-25 ~ +85	°C
Storage Temp.	Tstg	-25 ~ +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(DP)	V_F	-	3.6(1.8)	5.0(2.5)	V	I _F =20mA
Luminous Intensity Per Segment	I_v		45	-	mcd	
Peak Emission Wavelength	λ_P	-	660	-	nm	
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	
Reverse Current	I_R	-	-	100	μA	V _R =10V



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Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

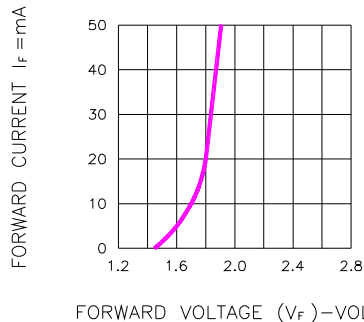


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

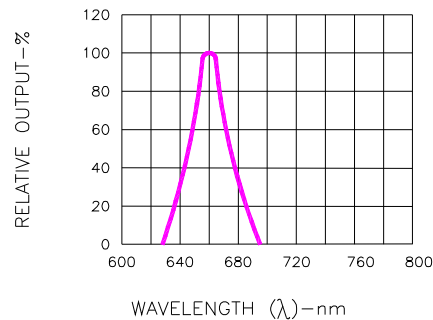


Fig.2 SPECTRAL RESPONSE

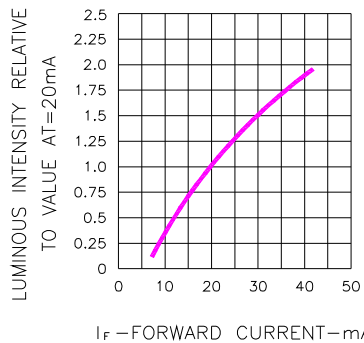


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

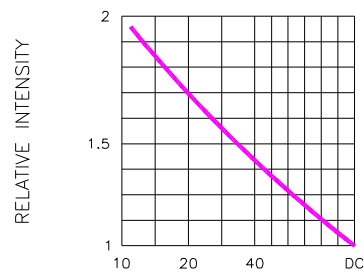


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE
(AVERAGE $I_F = 10\text{mA}$)

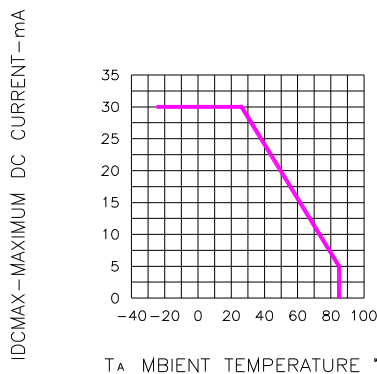


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

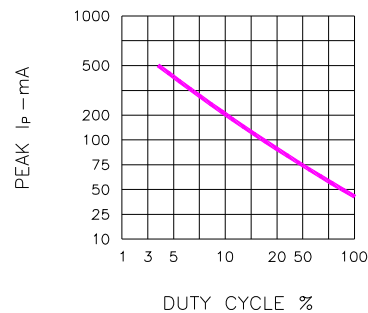


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE
(REFRESH RATE $f = 1\text{KHz}$)