CHINA
SEMICONDUCTOR
CORPORATION

Spec. No	PS-ND-08070507
Rev.	A

PRODUCT SPECIFICATION

Model No：CSD-322S/323S

Descriptions:

- 0.3 Inch Dual Digits Display
- CSD-322: Common Anode
- CSD-323: Common Cathode
- Emitting Color：Super Bright Red

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

CHINA SEMICONDUCTOR CORPORATION
Address:2FL. NO.909,Chung-Cheng Road,
Chung-Ho City Taipei Hsien,Taiwan.

Tel:886-2-2223-9696
Fax:886-2-2223-9377

OPTO PLUS TECHNOLOGIES CO.,LTD
Address:696 Shun jiang Rd.,Ji Shan St.Shaoxing,
ZheJiang,China

Tel:86-0575-8623888
Fax:86-0575-8623112

http://www.csctw.com.tw

CHINA
SEMICONDUCTOR
CORPORATION

Spec. No	PS-ND-08070507
Rev.	A

Model No：CSD-322/323S

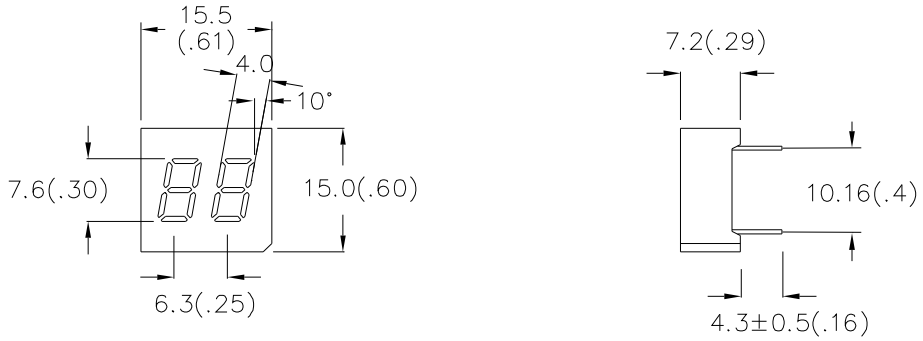
■ Features -

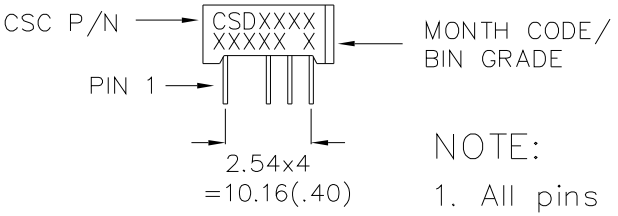
1. 0.3 inch (7.2mm) dight height.
2. Case mold type.
3. RoHs compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

■ Device Selection Guide -

Part No.	Chip		Description
	Material	Emitted Color	
CSD-322S	AlGaAs	Super Bright Red	Common Anode
CSD-323S	AlGaAs	Super Bright Red	Common Cathode

■ Package Dimensions -



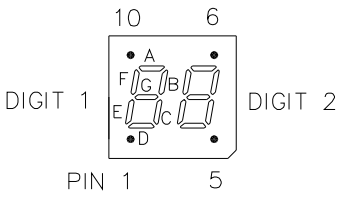


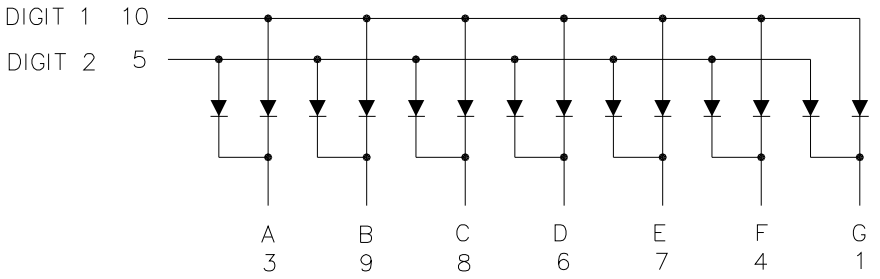
NOTE:

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

Model No：CSD-322/323S

■ Internal Circuit Diagrams -





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

■ Absolute Maximum Rating -

(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	I_{AF}	30	mA
Peak Current Per Dice(Duty cycle 1/10,1KHz)	I_{PF}	120	mA
Derating Linear From 25℃ Per Dice	-	0.42	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℃			

Model No：CSD-322/323S

■ Electro-optical Characteristics -

(Ta=25℃)

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	Iv	-	6	-	mcd	I_F=10mA
Peak Emission Wavelength	λp	-	660	-	nm	I_F=20mA
Dominant Wavelength	λd	-	643	-	nm	I_F=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	I_F=20mA
Reverse Current	IR	-	-	100	μA	V_R=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	I_F=10mA

Model No：CSD-322/323S

■ Typical Electrical / Optical Charateristics Curves -

(Ta = 25℃ Unless Otherwise Noted)

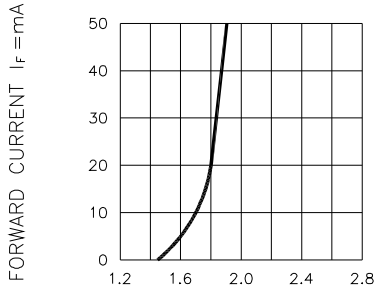


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

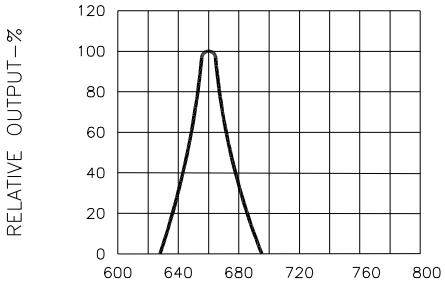


Fig.2 SPECTRAL RESPONSE

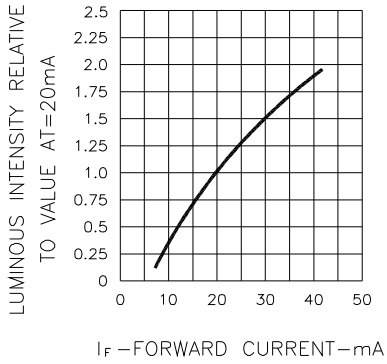


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

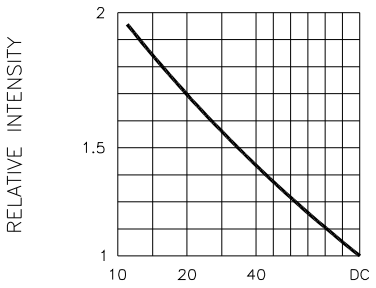


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

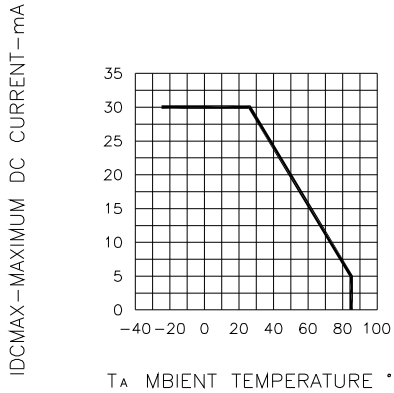


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

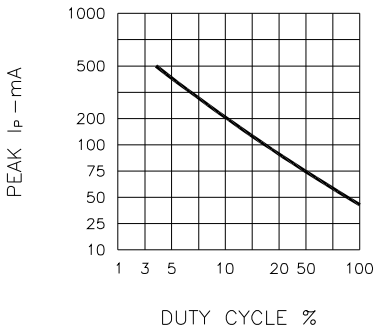


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)