

TRIAD DIGIT DISPLAY

CSQ-541D/542D

Feature

- 0.56 inch (14.2mm) Digit height.
- Case mold type
- Excellent character appearance
- Wide viewing angle

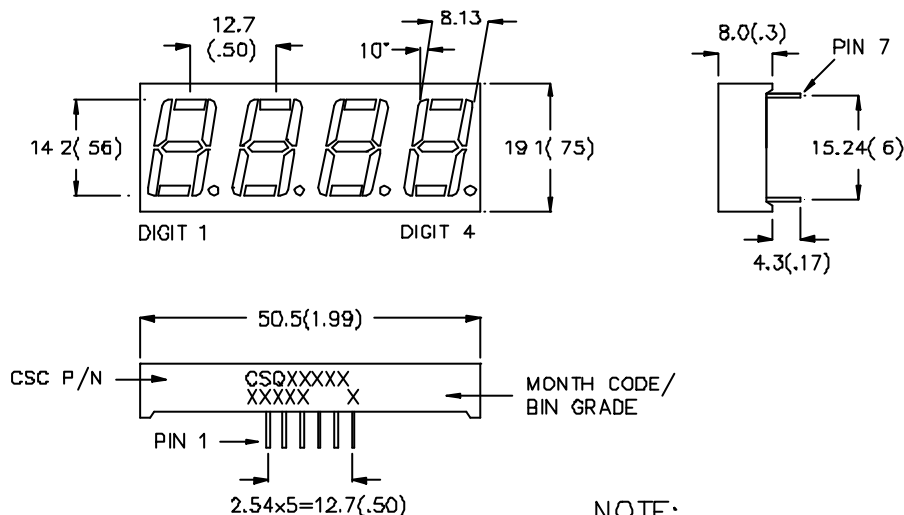
Model no.

- CSQ-541D/542D Super Bright Red (GaAlAs/GaAs,DH)

Description

- CSQ-542D is common anode
- CSQ-541D is common cathode

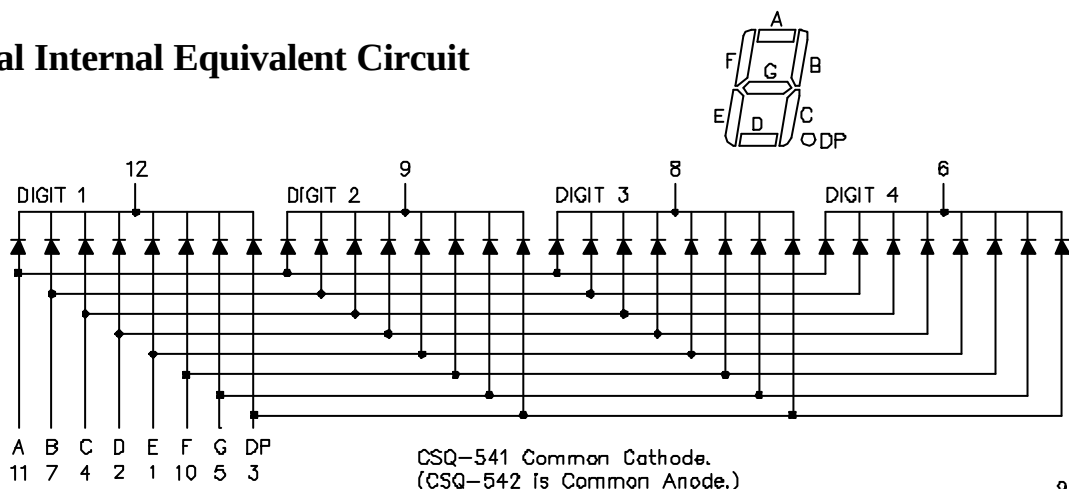
Mechanical Dimension



NOTE:

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

Typical Internal Equivalent Circuit





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CSQ-541D/542D

GENERAL SPECIFICATIONS

Absolute Maximum Ratings ($T_A=25$)

Parameter	Symbol	Super-Bright Red (DH)	Unit
Power dissipation per dice	PAD	75	mW
Derating Liner from 25 per dice	-	0.42	mA/
Continuous forward current per dice	IAF	30	mA
Peak current per dice (duty cycle 1/10, 1kHz)	IPF	200	mA
Reverse voltage per dice	VR	5	V
Operating temperature	Topr	-25 to +85	
Storage temperature	Tstg	-25 to +85	
Solder temperature 1/16 inch below seating plane for 3 seconds at 250			

Electro-optical Characteristics ($T_A=25$)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage per segment	V _F	I _F =20mA	-	1.8	2.5	V
Luminous intensity per segment	I _V	I _F =20mA	-	15	-	mcd
Peak emission wavelength	λ_p	I _F =20mA	-	660	-	nm
Spectrum radiation bandwidth	λ	I _F =20mA	-	20	-	nm
Reverse current	I _R	V _R =5V	-	-	100	μ A

Bin Grade (Unit: mcd)

Device \ Bin	P	Q	R	S		
Super-Bright Red (DH)	10.0~13.0	13.1~17.0	17.1~22.0	22.1~28.0		

* Tolerance : $\pm 20\%$

00-09-A



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SUPER BRIGHT RED (GaAlAs/GaAs,DH) GENERAL SPECIFICATIONS

Typical Electro-optical Characteristic Curves (25°C Free Air Temperature Unless Otherwise Specified)



Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

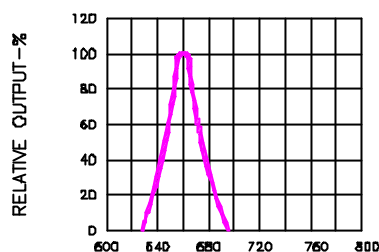


Fig.2 SPECTRAL RESPONSE

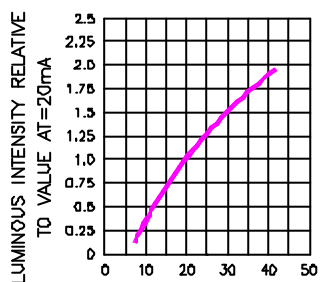


Fig.3 RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT

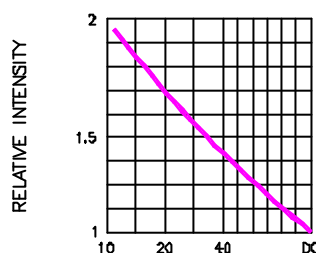


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE
(AVERAGE $I_F=10\text{mA}$)

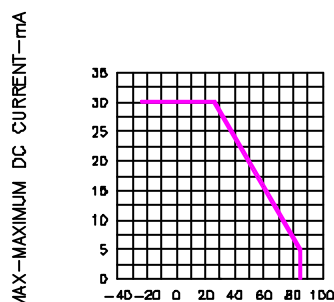


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER
SEGMENT VS. A FUNCTION OF AMBIENT
TEMPERATURE

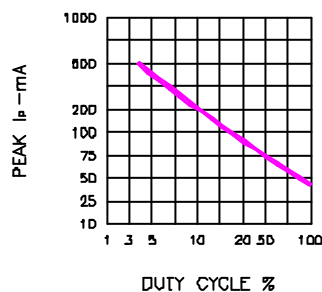


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE $f=1\text{ KHz}$)