

PRODUCT SPECIFICATION

Model No : CSM-16151E/16161E

Descriptions:

- 1.5 Inch 16X16 Dot-Matrix Display
- Dot Pitch 2.5mm
- CSM-16151: Column Anode, Row Cathode
- CSM-16161: Column Cathode, Row Anode
- Emitting Color: Orange



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No : CSM-16151/16161E

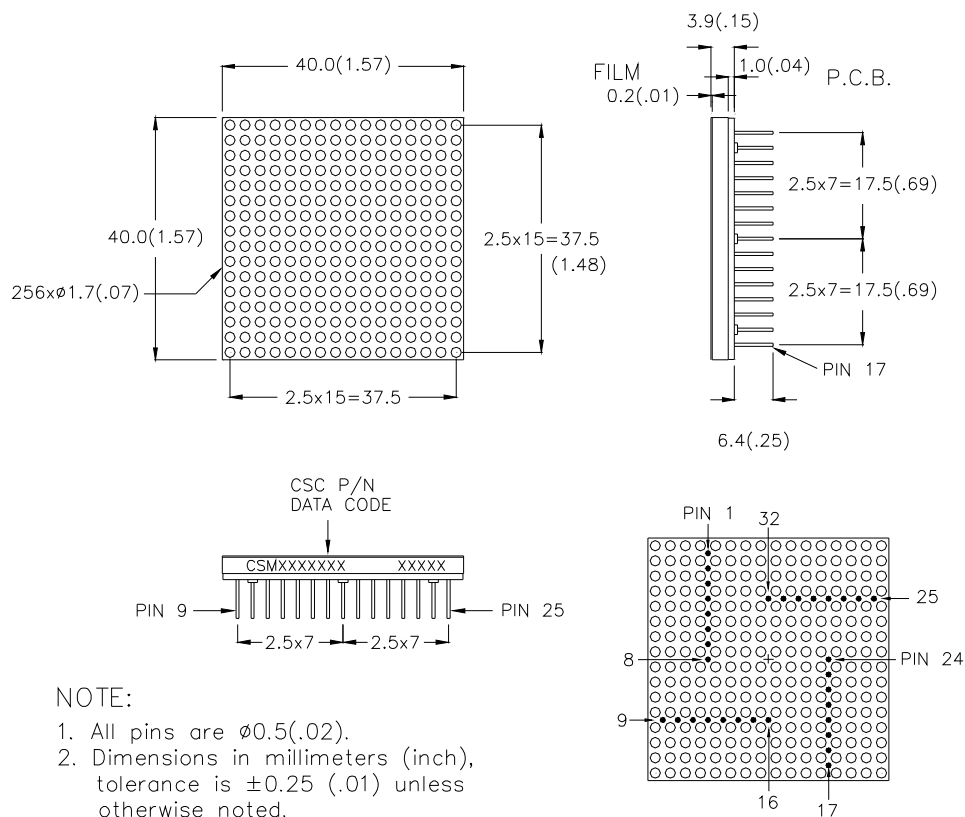
Features -

1. 1.5 inch (39.2mm) Matrix height.
2. Case mold type.
3. RoHs compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

Device Selection Guide -

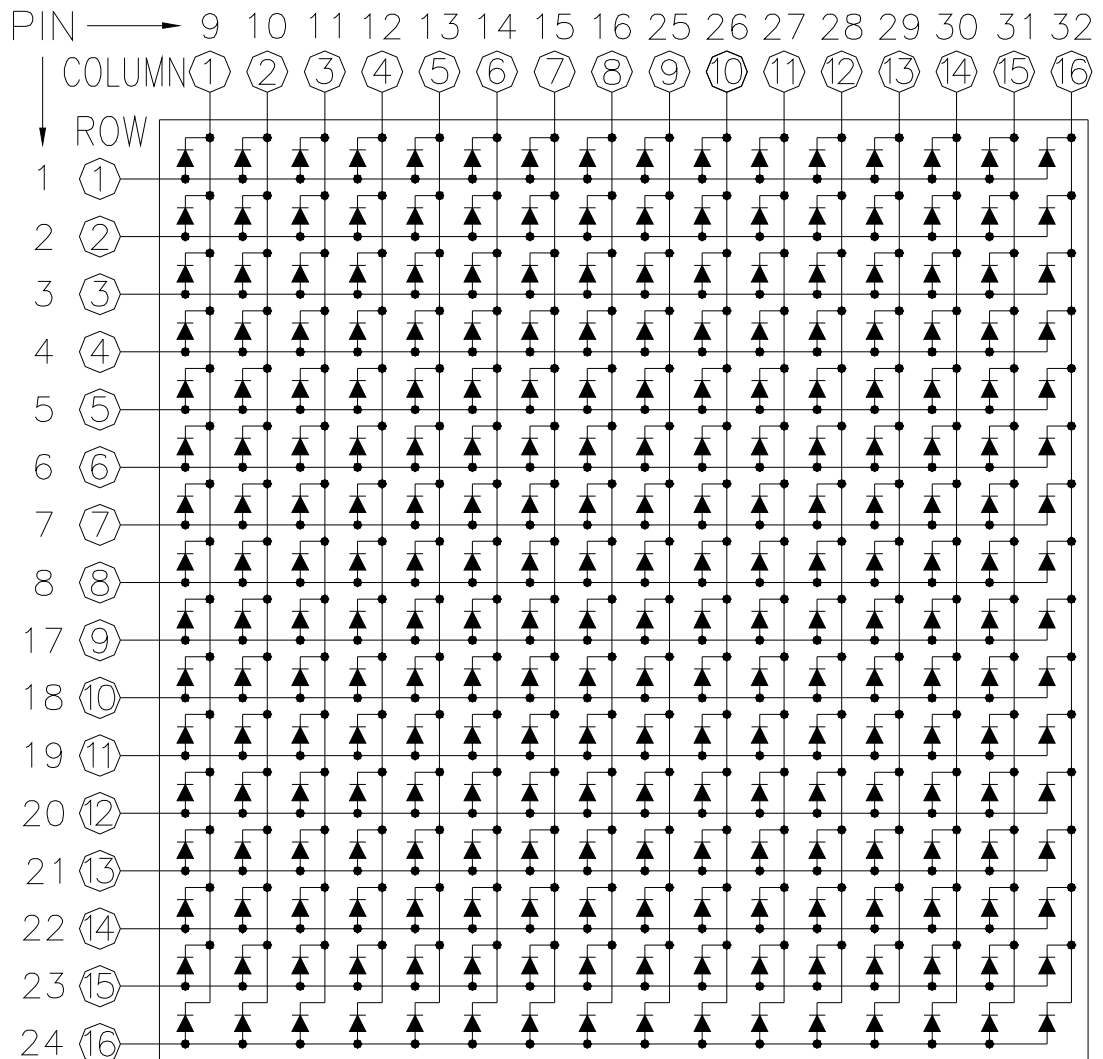
Part No.	Chip		Column	Row
	Material	Emitted Color		
CSM-16151E	GaAsP	Orange	Anode	Cathode
CSM-16161E	GaAsP	Orange	Cathode	Anode

Package Dimensions -





Spec. No.	PS-ND-08090303
Rev.	A

Model No : CSM-16151/16161E**Internal Circuit Diagrams -**

CSM-16151 Column Anode, Row Cathode.
(CSM-16161 Column Cathode, Row Anode.)

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■ **Absolute Maximum Rating -**

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	IPF	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	Tstg	-35 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

■ **Electro-optical Characteristics -**

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	VF	-	2.1	2.8	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	3	-	mcd	IF=10mA
Peak Emission Wavelength	λ_p	-	632	-	nm	IF=20mA
Dominant Wavelength	λ_d	-	624	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	35	-	nm	IF=20mA
Reverse Current	IR	-	-	100	-	VR=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	IF=10mA

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Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

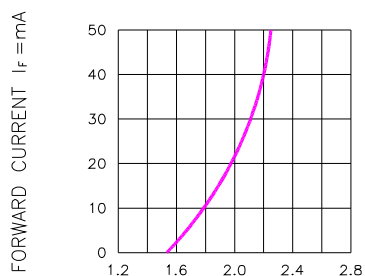


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

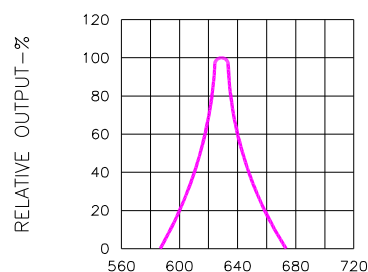


Fig.2 SPECTRAL RESPONSE

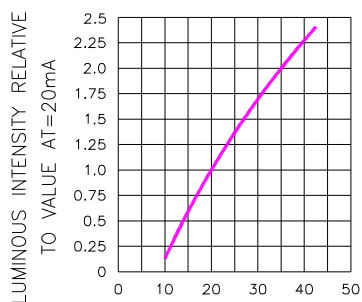


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

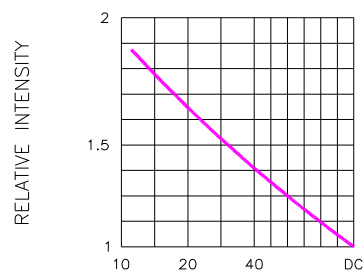


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE
(AVERAGE I_F=10mA)

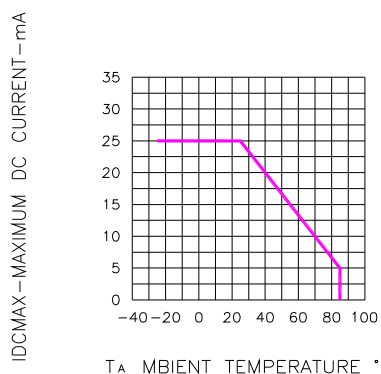


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

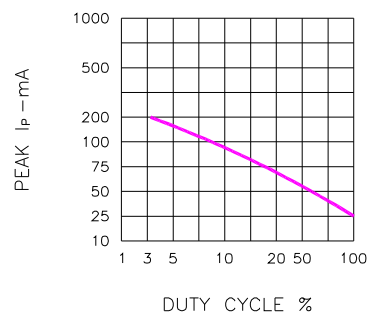


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)