

# 16Dot\*16Dot LED DOT MATRIX

MODEL : SSD-D9696DLM

Seoul Semiconductor Co., Ltd.

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## 1. GENERAL DESCRIPTION

The SSD-D9696DLM(Cathode Column) is a high reliability epoxy molded 96\*96mm  $\phi$ 4.6 dot matrix LED displays.

A red and green chips are contained in each dots and it could be displayed in red or green color separately and appears in amber color when driven to red and green side in the same time, and constructed with black top face.

## 2. FEATURES

COLOR	RED , GREEN , AMBER
DOT SIZE (mm)	4.6
DOT PITCH (mm)	6
NUMBER OF DOT	256 (16*16)
DIMENSION (mm)	96*96

## 3. ELECTRICAL SPECIFICATION (ABSOLUTE MAXIMUM RATINGS)

(Ta=25°C)

Parameter	Symbol	Red	Green	Unit
Power Dissipation Per Dot	$P_D$	48	52	mW
Forward current	$I_F$	20	20	mA
Peak forward current *	$I_{FP}$	70	70	mA
Reverse voltage	$V_R$	5	5	V
Operating temperature	$T_{opr}$	-10 ~ +60		°C
Storage temperature	$T_{stg}$	-20 ~ +70		°C

\* DUTY RATIO : 1/16

## 4. OPTICAL SPECIFICATION

(Ta=25°C)

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
LUMINOUS INTENSITY	RED	$I_V$	$I_F = 20mA$	8	12	15	mcd
	GREEN			8	12	15	
PEAK EMISSION WAVELENGTH	RED	$\lambda_p$	$I_F = 20mA$	-	617	-	nm
	GREEN			-	574	-	
VIEWING ANGLE	HORIZONTAL	$2\theta$ 1/2	$I_F = 20mA$	-	45	-	deg
	VERTICAL			-	45	-	

\* GENERAL TOLERANCE :  $\pm 15\%$



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PRODUCT NAME

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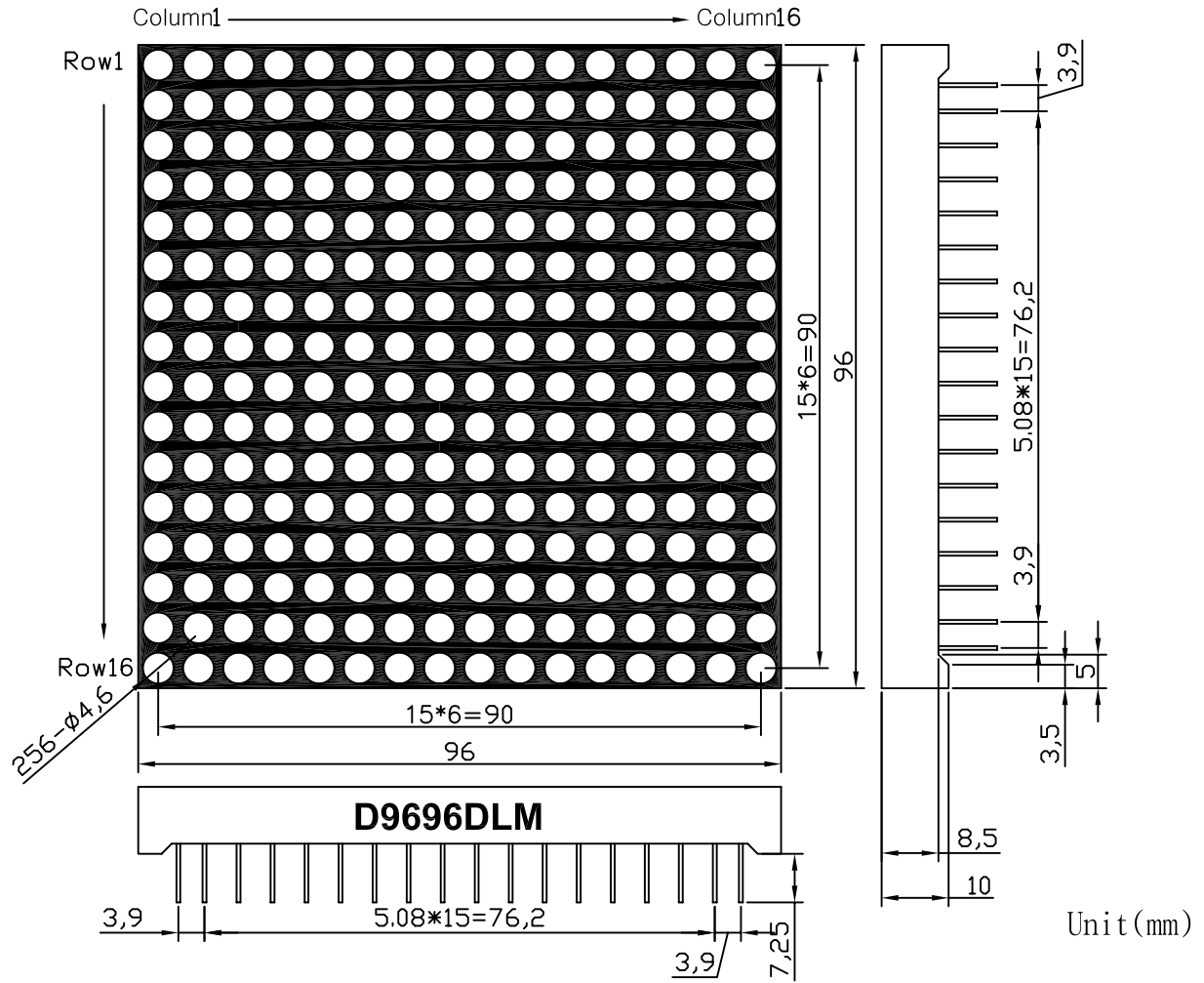
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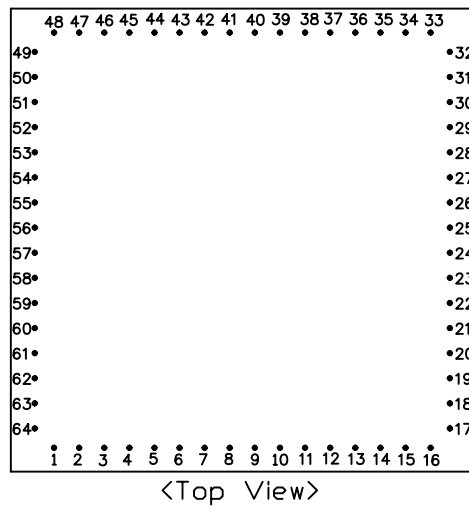
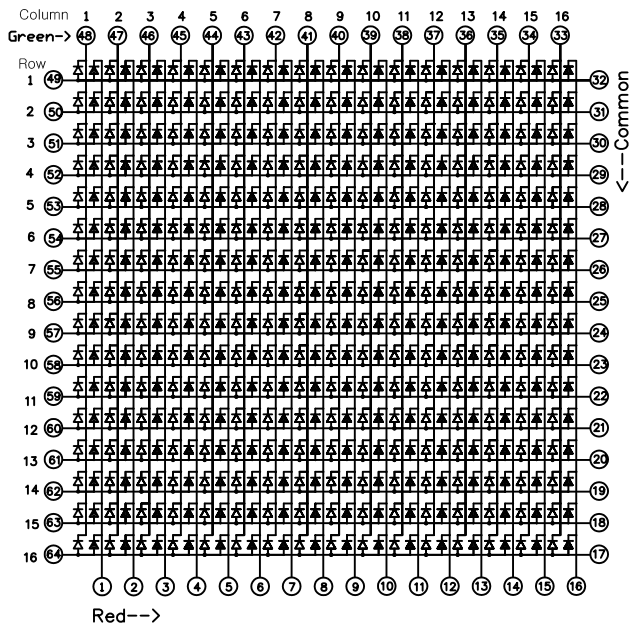
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## 5. PACKAGE DIMENSION



## 6. PIN ARRANGEMENT



LED COLORS :   
 ➔ Red   
 ➔ Yellow-Green



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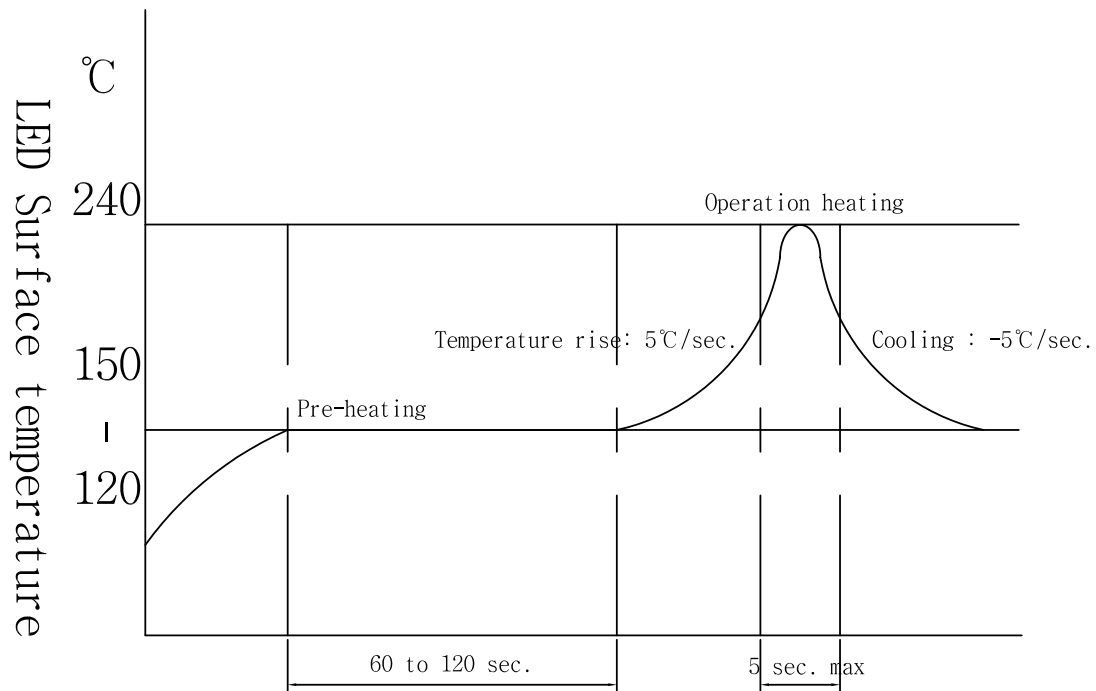
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## 7. 솔더링 조건(soldering condition profile)

### 1) Overflow Soldering Conditions / Profile

preliminary heating to be at 150°C max. for 2minutes max.  
 solering heat to be at 240°C max. for 5seconds max.



### 2) Hand Soldering conditions

Not more than 3 seconds @ MAX280°C, under Soldering iron.



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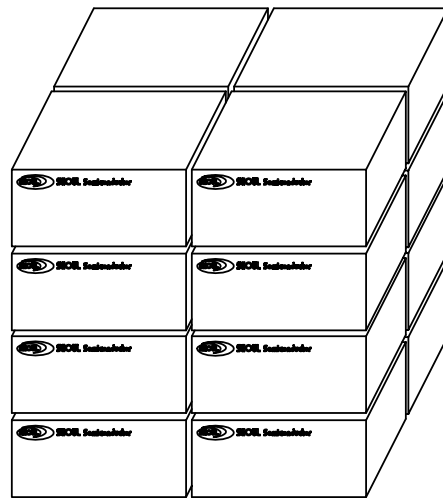
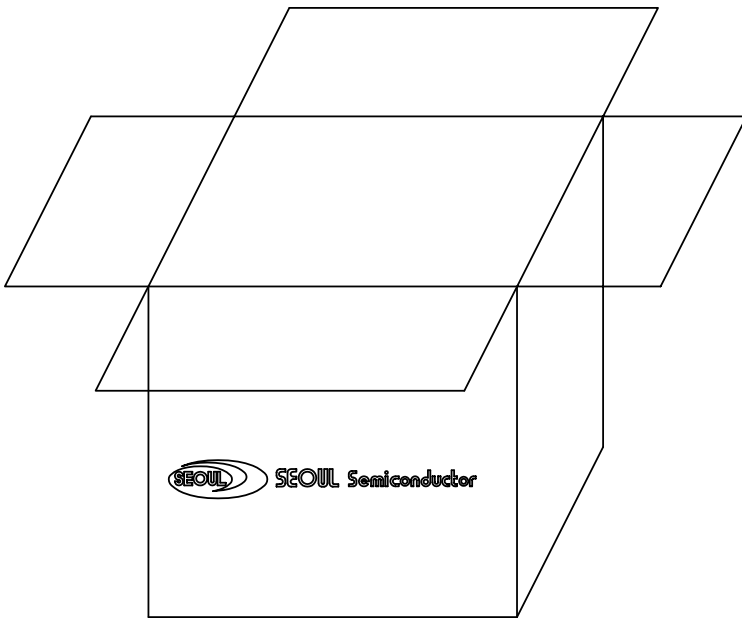
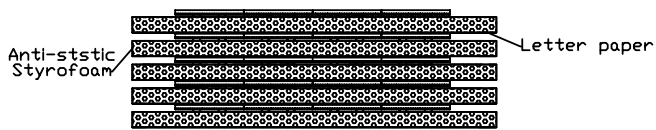
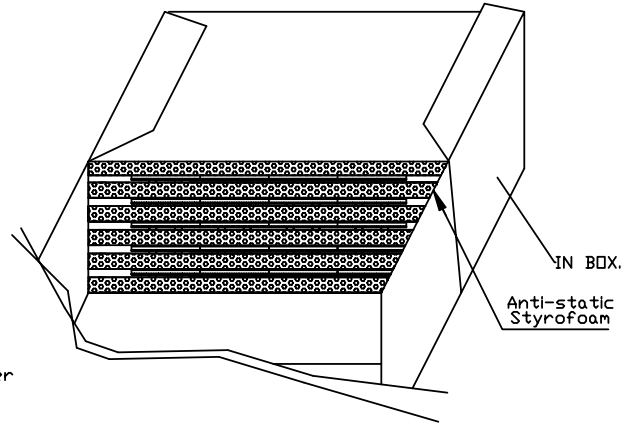
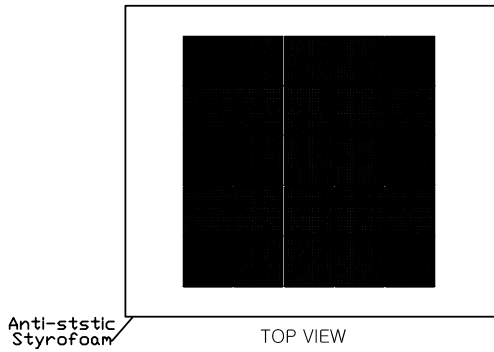
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# 8. PACKING



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## 8. 취급 및 설치시 주의사항 (SAFETY)

- 입력 범위 이상의 전원이나 역전압이 DOT MATRIX LED에 유입될 시는 내부회로가 손상되오니 입력전압 범위를 반드시 지켜주시기 바랍니다.
- Backward voltage or overvoltage flows in the DOT MATRIX LED can damage the internal circuits. Please operate the module under the permitted scope of voltage supply.
- 높은 습도나 누수에 의해 DOT MATRIX LED의 고장 원인이 될 수 있습니다.
- High humidity and leak can damage DOT MATRIX LED.
- DISPLAY PANEL의 수가 많을 경우 및 배기시설이 양호하지 않을 경우에는 DOT MATRIX LED 발열에 의한 MODULE의 손상과 오동작이 발생될 수 있으므로 필요시 COOLING FAN을 설치하시기 바랍니다.
- Install a cooling fan for cooling out the LED module in order to avoid damage or operating failure caused by the heat when many display panels are attached to one board or the module is operated under ill-ventilated conditions.
- DOT MATRIX LED에 충격 및 진동을 가할 경우 DOT불량, 단선등의 원인이 될 수 있으므로 삼가시기 바랍니다.
- DOT MATRIX LED could be damaged or broken by a shock or collision.
- DOT MATRIX LED에 찍힘이나 긁힘이 발생하지 않도록 주의하시기 바랍니다.
- Be careful not to scratch or impact the DOT MATRIX LED.
- DOT MATRIX LED를 취급, 보관할 경우 정전기 방지 포장을 하여 주십시오.
- Treat or keep under the condition of static electricity-proof packing.
- Twisted cable 또는 Shielded wire는 고주파 잡음으로 부터 module을 보호하여 안정된 동작을 할 수 있으므로 필히 사용 하십시오.
- It is recommended to use twisted cable or shielded wire to protect the module from high-frequency noise and to secure stable operation.
- 1번 PIN을 확인하시고, 사용하십시오.
- Please pay attention it's pin numbur before you work.



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