

# High Reliability 2.52-inch (64.0mm) Dual-Color 16×16 3.2 Dot Matrix LED Displays

# SDM-3169

## GENERAL DESCRIPTION

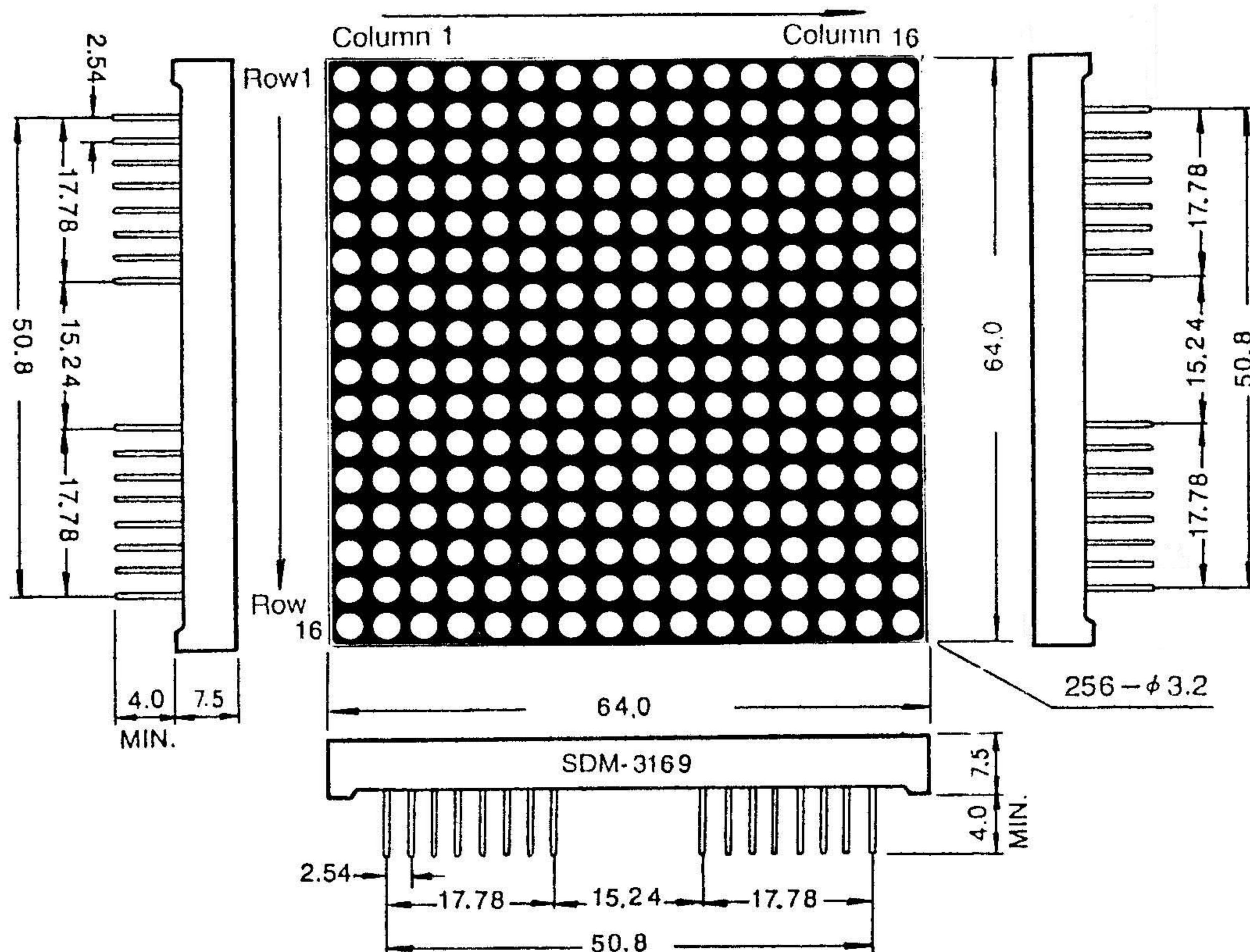
The SDM-3169 (cathode column) is a high performance epoxy resin molded 64.0×64.0mm ø3.2 dot matrix LED displays. A red and green chips are contained in each dots and it could be displayed in red or green color separately and also appears in amber color when drive to red and green in the same time. The standard unit is constructed with black face and milky white segment color.

## FEATURES

1. High brightness with high contrast
2. Wide angle viewing
3. Low power consumption
4. Solid state reliability

## PACKAGE DIMENSIONS

SCALE 1:1 (mm)

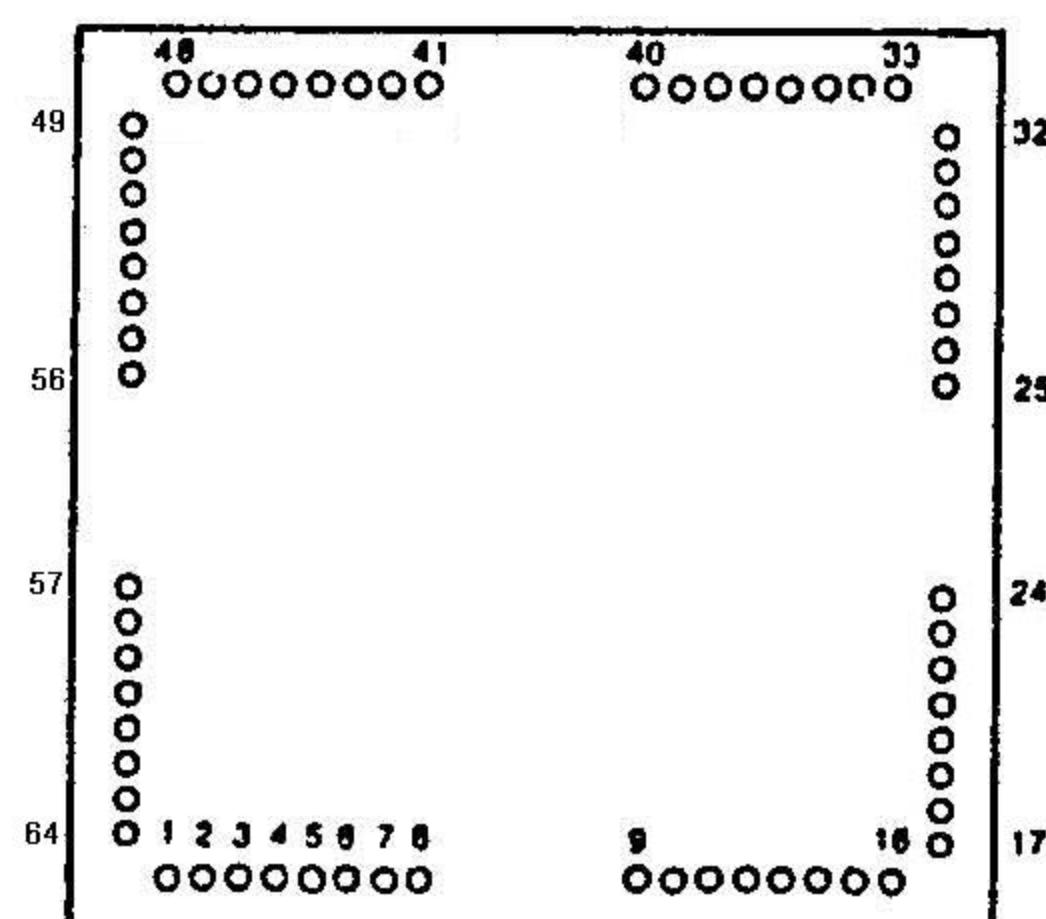


三光半導體株式會社

SAM KWANG SEMICONDUCTOR CO., LTD.

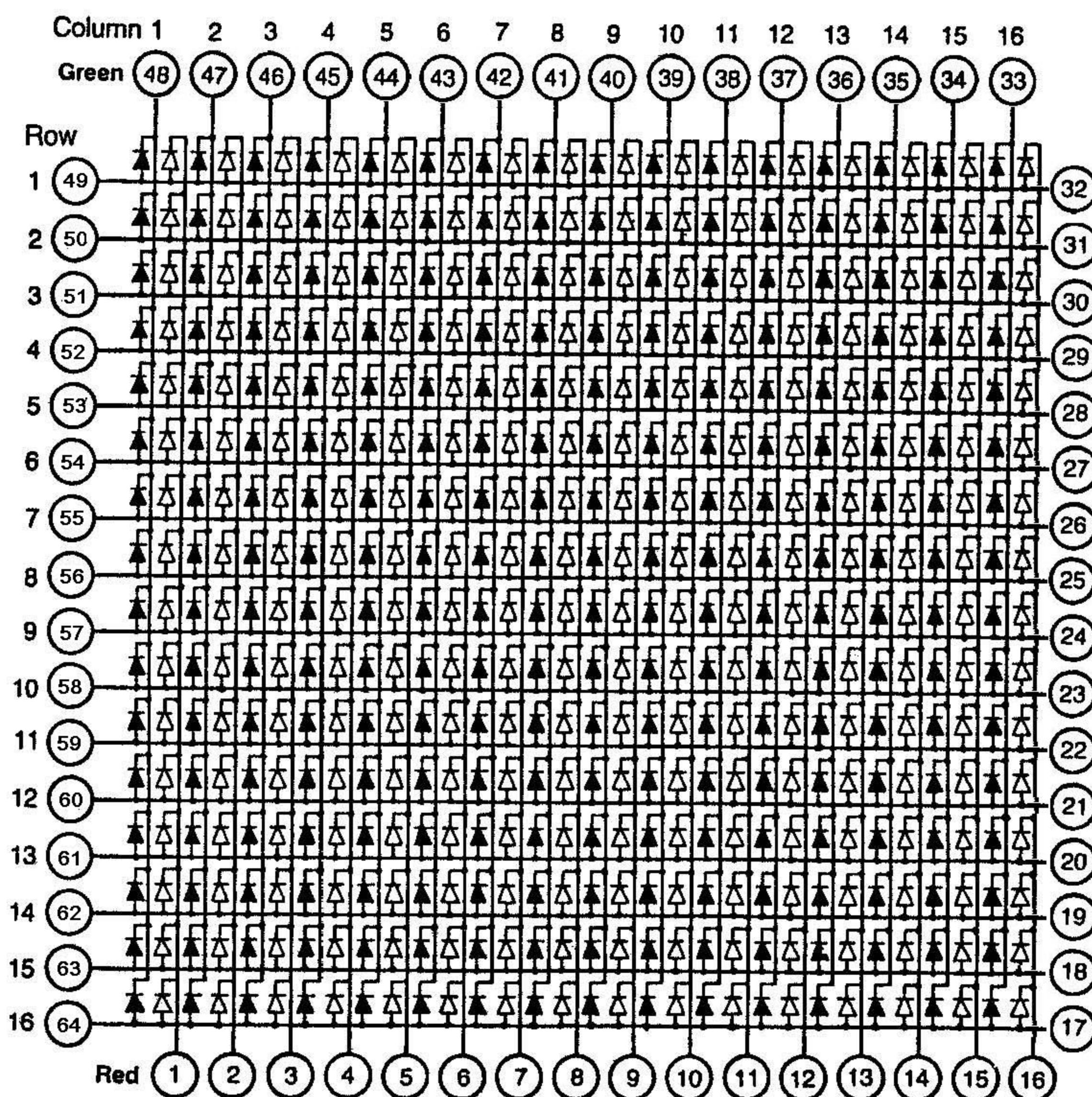
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TEL:031-456-1444/1484, FAX:031-456-4224

**PIN ARRANGEMENT**  
(Top View)



—► orange (Red)

—► yellow-green



**SDM 3169 SR-UG (GaAsP/GaP-GaP)**

**Orange SR SIDE (GaAsP/Gap) GaP)**

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	2500	mW
Power dissipation/Chip	20	mW
Forward current	10	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/ Chip	$V_F$	$I_F = 10\text{mA}$	—	2.0	2.2	V
Reverse current/ Chip	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous Intensity/ Chip	$I_V$	$I_F = 10\text{mA}$	500	1000	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	635	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	35	—	nm

**Yellow-green UG SIDE (GaP)**

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	2500	mW
Power dissipation/Chip	20	mW
Forward current	10	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/ Chip	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current/ Chip	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/ Chip	$I_V$	$I_F = 10\text{mA}$	600	1200	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	30	—	nm

\* Duty ratio=1/16, Pulse width=0.1ms, Lighting ratio=50%