

High Reliability 1.54-inch 5.0mm 5x7 Dot Matrix LED Displays

SDM-6570/2 SDM-6577/9

GENERAL DESCRIPTION

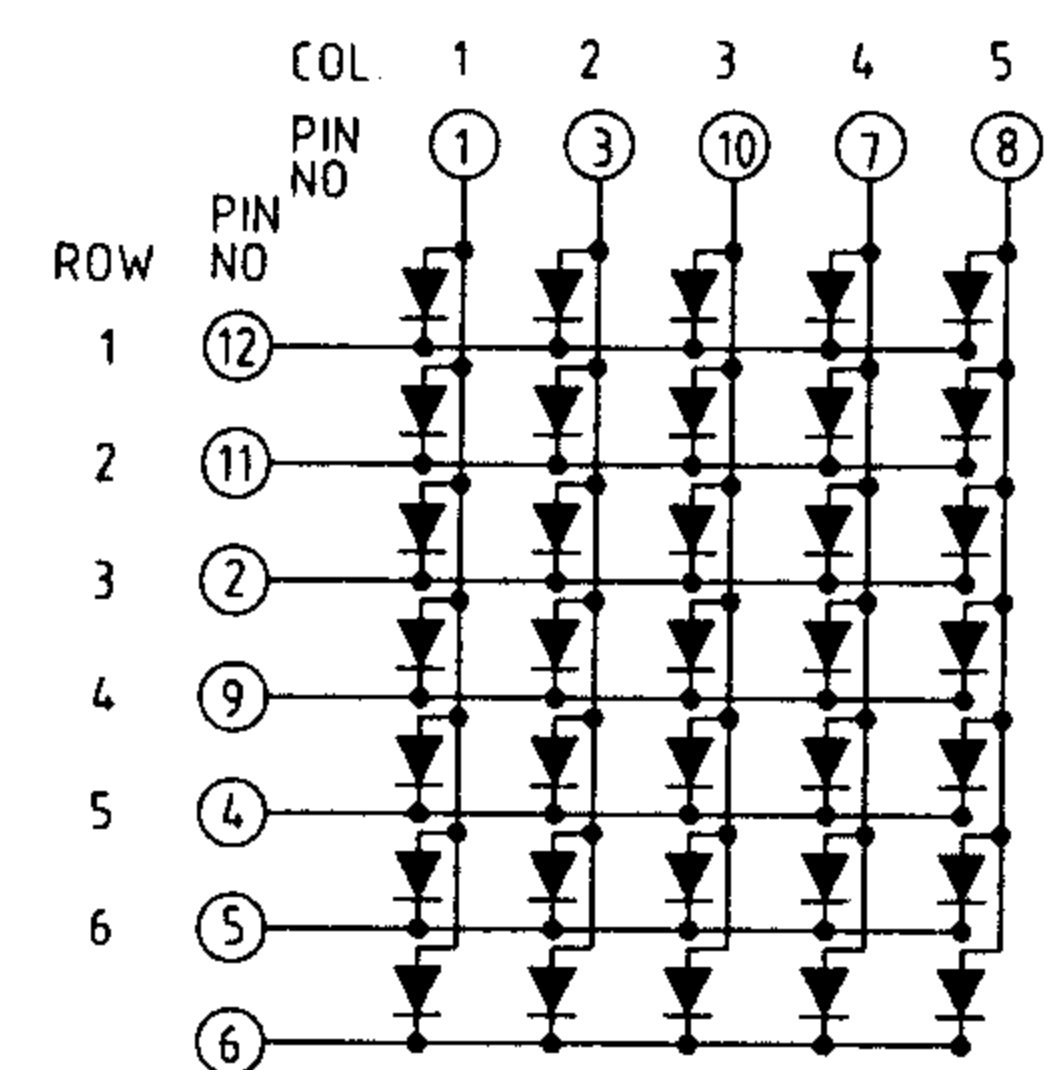
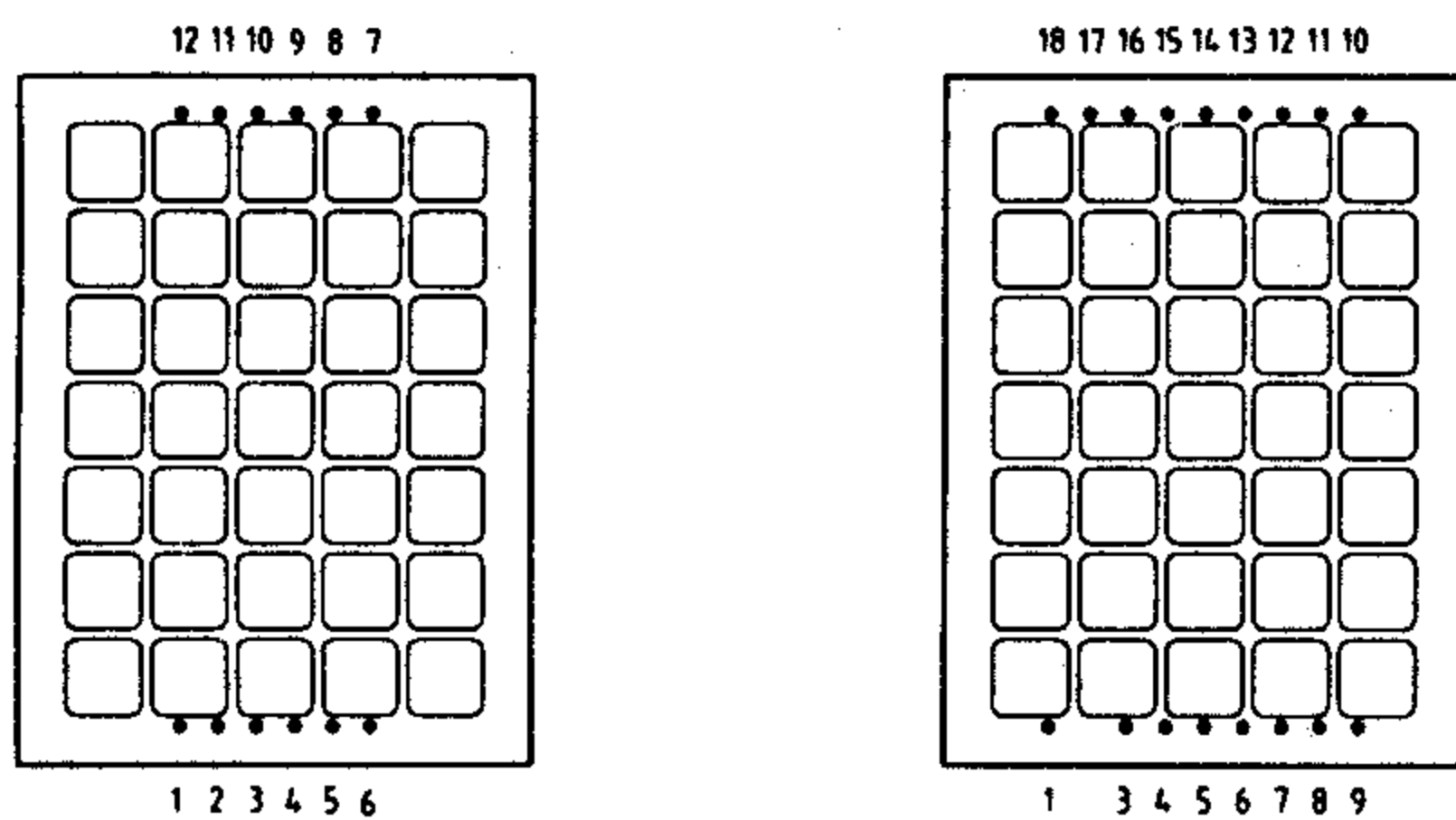
The SDM-6570 and the SDM-6577 are 1.54 inch (39.2mm) height epoxy molded 5.0x5.0mm Square Dot matrix LED displays. The standard units are available in red, green, orange and yellow-green emitting colors, with 5x7 array and x-y select and also available in dual color types SDM-6572 and SDM-6579.

FEATURES

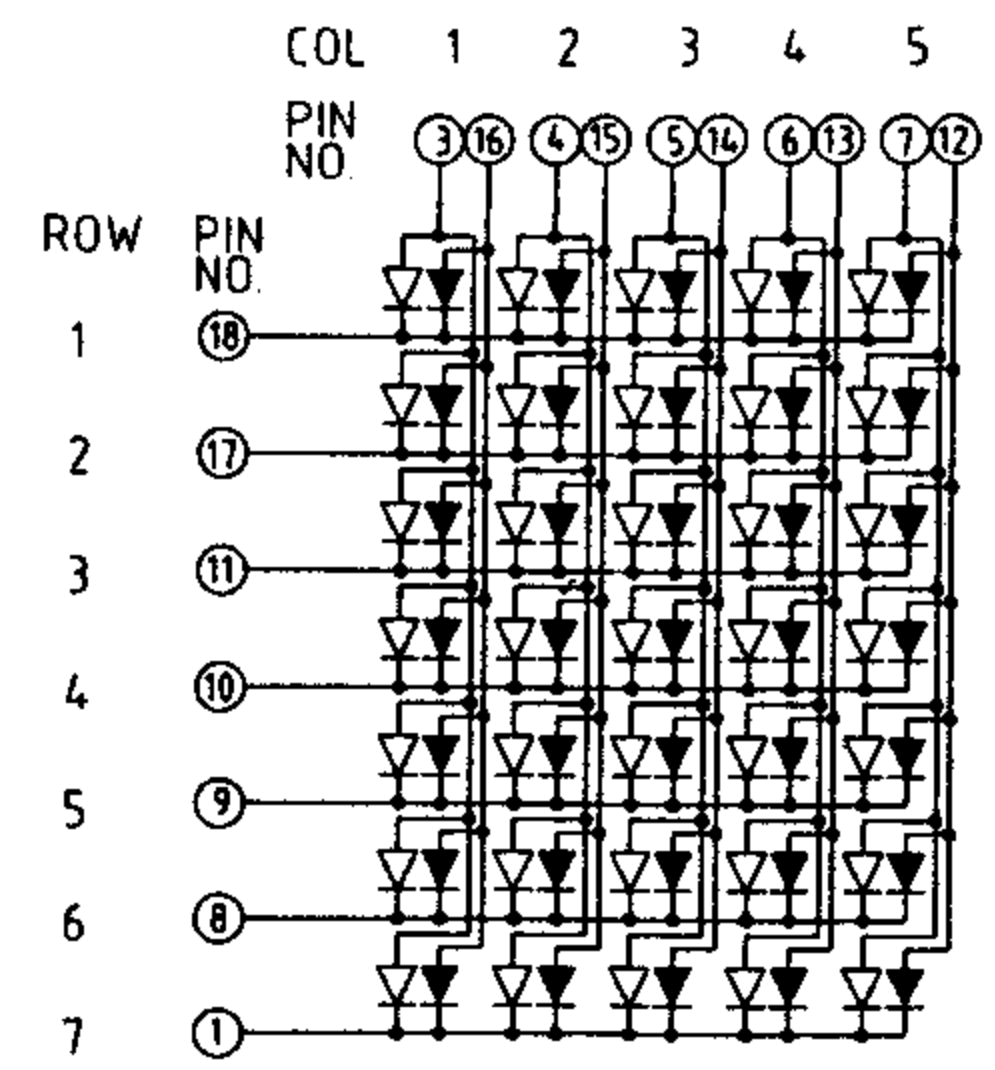
1. High brightness with high contrast
2. Wide angle viewing
3. Low power consumption;
Directly drive with I.C
4. Solid state reliability;
Long operation life
5. Cathode-row (SDM-6570/2) and cathode column (SDM-6577/9) types available

PIN ARRANGEMENT

(Top View)



SDM-6570 (Cathode row)

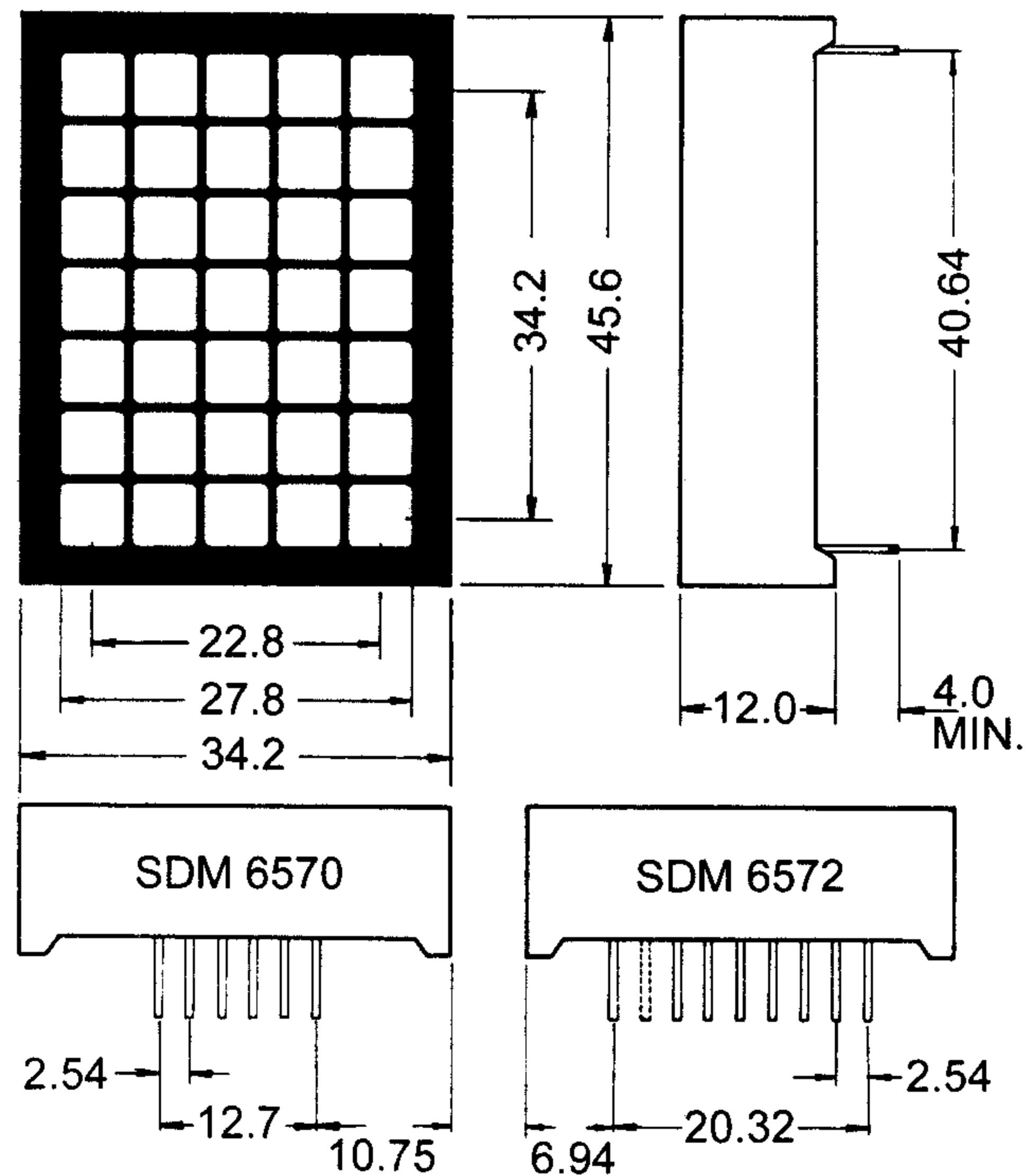


SDM-6572 (Cathode row)

SDM-6577/9 (Cathode column) All diodes are reversed polarity

SCALE 1:1 (mm)

PACKAGE DIMENSIONS



三光半導体株式会社

SAM KWANG SEMICONDUCTOR CO., LTD.
803 Silla Techno Vil., 39-3 Dang-dong Kunpo-City Kyungki-do, Korea,
TEL:031-456-1444/1484, FAX:031-456-4224

Red SDM 6570/6577UR (GaAlAs)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	1400	mW
Power dissipation/Dot	30	mW
Forward current	15	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°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Dot	V _F	I _F = 10mA	—	1.9	2.1	V
Reverse current/Dot	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/Dot	I _V	I _F = 10mA	1300	2500	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	660	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	20	—	nm

Orange SDM 6570/6577SR (GaAsP/GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	1400	mW
Power dissipation/Dot	30	mW
Forward current	15	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°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Dot	V _F	I _F = 10mA	—	2.0	2.2	V
Reverse current/Dot	I _R	V _R = 4V	—	—	10	μA
Luminous Intensity/Dot	I _V	I _F = 10mA	500	1000	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	635	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	35	—	nm

Yellow-green SDM 6570/6577UG (GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	1400	mW
Power dissipation/Dot	30	mW
Forward current	15	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°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Dot	V _F	I _F = 10mA	—	2.1	2.3	V
Reverse current/Dot	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/Dot	I _V	I _F = 10mA	600	1200	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	565	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	30	—	nm

Pulse Width 1 ms
Duty Cycle 1/5