

# High Reliability 0.6 inch 7 Segment Numeric Displays

## SND 630B SND 637B

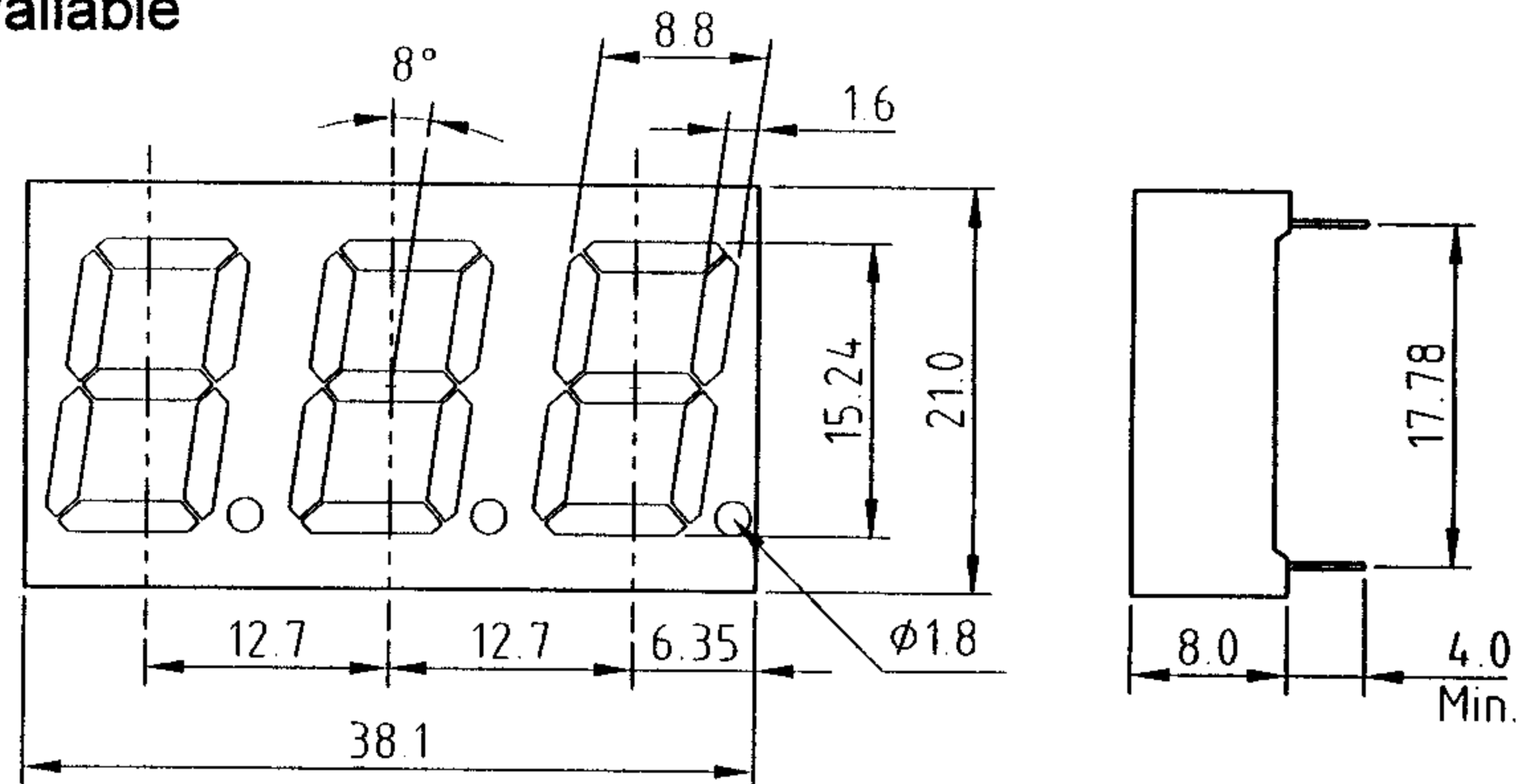
### GENERAL DESCRIPTION

The SND 630B and 637B are high performance epoxy resin molded 3-digit 7 segment LED displays of which character height is 0.6 inch (15.24mm). Those are available in red, green, orange, and yellow-green emitting colors. The standard units are constructed with black face and milky white segment color.

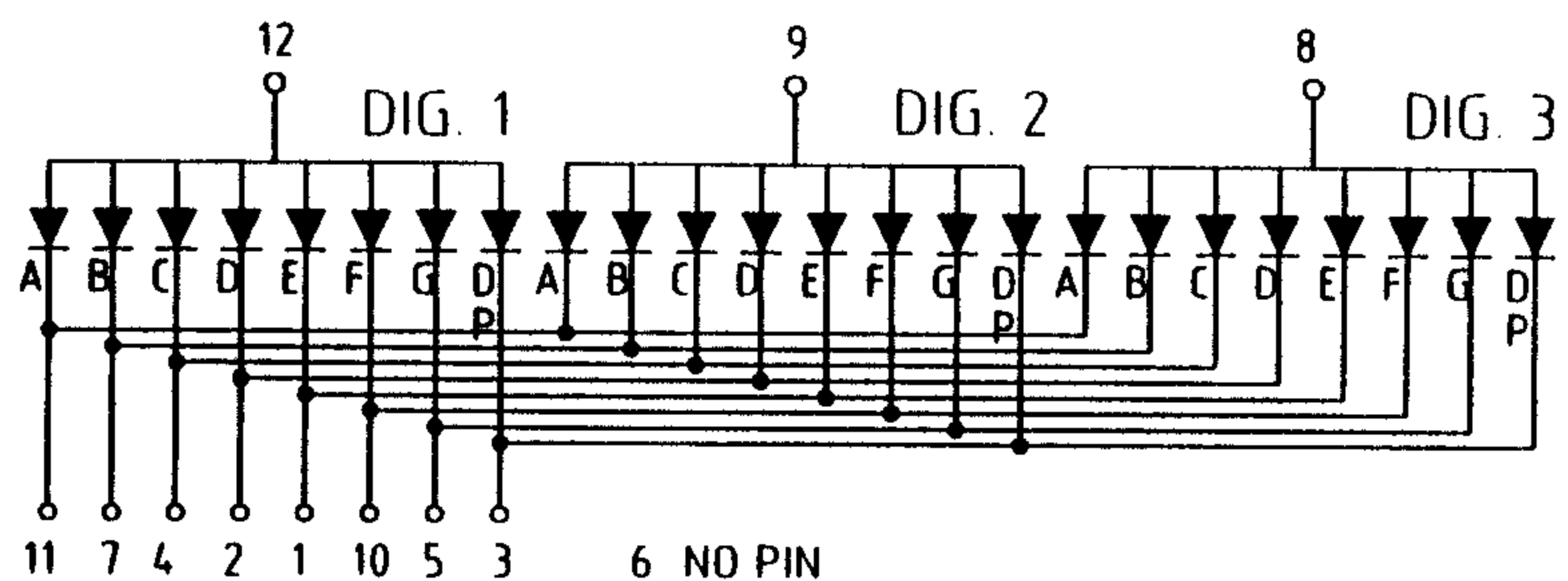
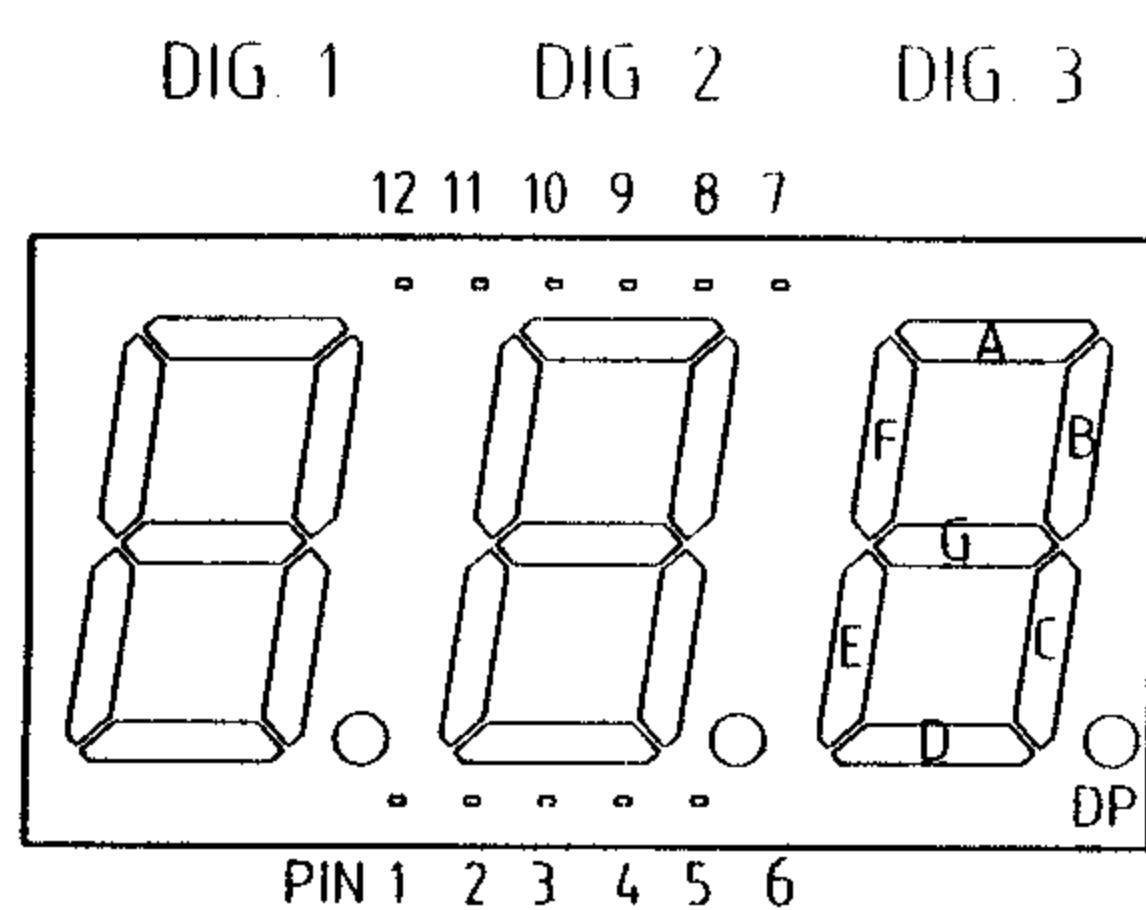
### FEATURES

1. High brightness with high contrast
2. Excellent visibility : uniform brightness, wide angle viewing
3. Low power consumption
4. Solid state reliability and long operation life
5. Cathode Common (SND 630B) and Anode Common (SND 637B) types available

### PACKAGE DIMENSIONIONS



### PIN ARRANGEMENT



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### Red SND 630/637R (GaP)

Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	960	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 10mA	—	2.1	2.3	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 4V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 10mA	200	700	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 10mA	—	700	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 10mA	—	30	—	nm

### Orange SND 630/637SR (GaAsP/GaP)

Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	960	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 10mA	—	2.0	2.2	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 4V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 10mA	600	1300	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 10mA	—	635	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 10mA	—	35	—	nm

### Yellow-green SND 630/637UG (GaP)

Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	960	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 10mA	—	2.1	2.3	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 4V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 10mA	600	1300	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 10mA	—	565	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 10mA	—	30	—	nm

### Red SND 630/637UR (GaAlAs)

Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	960	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 10mA	—	1.85	2.1	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 4V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 10mA	1800	3000	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 10mA	—	660	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 10mA	—	20	—	nm

\* Pulse Width . . . . . 1 ms  
Duty Cycle . . . . . 1/5