

High Reliability 0.315-inch 7-Segment & ± 1 LED Displays

SND-310 SND-314 SND-317

GENERAL DESCRIPTION

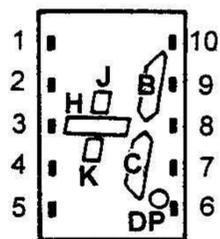
The SND-310, SND-317 and SND-314 series are a high reliability single digit 7-segment or ± 1 digit LED displays of which character height is 0.315-inch (8.0mm) for an application which space is at a premium and there is a choice of four emitting colors; red, green, orange and yellow-green. The standard unit is constructed with black face and white segment color.

FEATURES

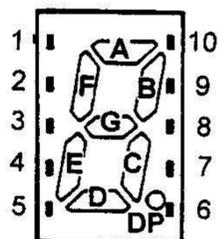
1. High brightness with high contrast
2. Low power consumption means I.C compatibility
3. Uniform brightness and wide angle viewing
4. Cathode-common (SND 310) and anode-common (SND 317) types available.
5. SND-314 could be used as a cathode common or anode common configuration

CONNECTIONS GUIDE

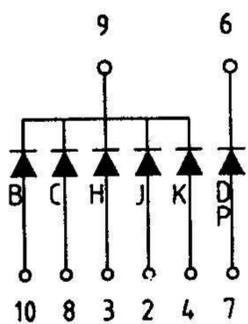
(Top View)



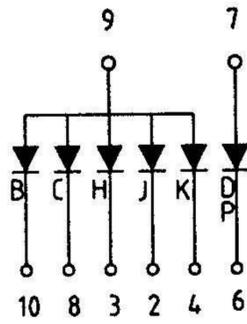
SND-314A / K



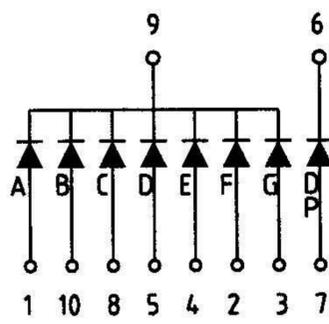
SND-310 / 7



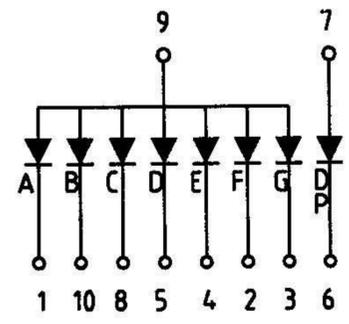
SND-314K
(Cathode Common)



SND-314A
(Anode Common)



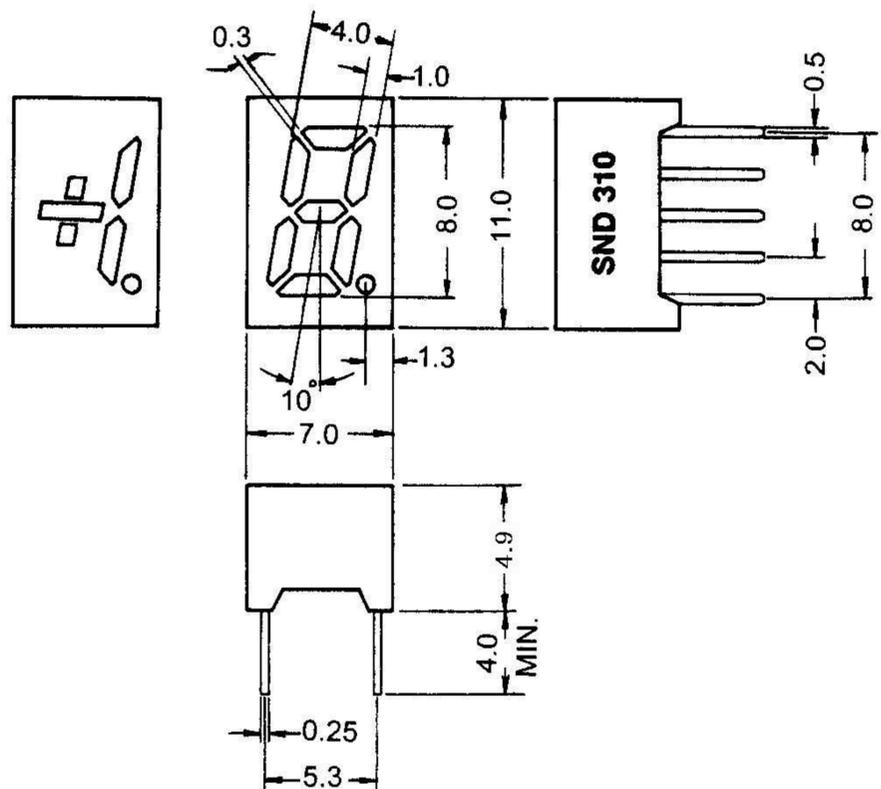
SND-310
(Cathode Common)



SND-317
(Anode Common)

PACKAGE DIMENSIONS

Actual size



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SAM KWANG SEMICONDUCTOR CO., LTD.

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Red SND 310/317/314R (GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	Δ320/240	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_a = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V _F	I _F = 10mA	—	2.1	2.3	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/digit	I _V	I _F = 10mA	300	800	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	700	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	100	—	nm

Orange SND 310/317/314SR (GaAsP/GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	Δ320/240	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_a = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V _F	I _F = 10mA	—	2.0	2.2	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/digit	I _V	I _F = 10mA	700	1500	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	635	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	35	—	nm

Yellow-green SND 310/317/314UG (GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	Δ320/240	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_a = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V _F	I _F = 10mA	—	2.1	2.3	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/digit	I _V	I _F = 10mA	600	1500	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	565	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	30	—	nm

* Pulse Width 1 ms Δ SND 314
Duty Cycle 1/5