# High efficiency, single-digit numeric displays

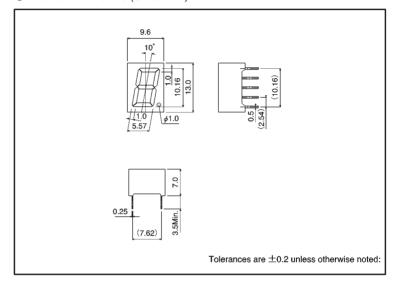
## **LA-401 DN Series**

The LA-401 DN series were designed to meet the need for small single-digit numeric displays. These LED numeric displays use GaAsP on GaP for the emitting material (with the exception of green) and are housed in an epoxy resin package. They are single-digit displays with a character height of 10.16 mm.

#### Features

- 1) Height of character: 10.16 mm.
- Common anode and common cathode configurations are available for each color.
- Each segment has independent pin connections making static drive possible.
- 4) High-efficiency reflectors are used to achieve a bright, clear display.
- The package surface is painted black and the segments are colored the display color.

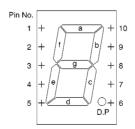
#### External dimensions (Units: mm)



#### Selection guide

Emitting color Common	Red	Orange	Yellow	Green		
Anode	LA-401VD	LA-401DD	LA-401YD	LA-401MD		
Cathode	LA-401VN	LA-401DN	LA-401YN	LA-401MN		

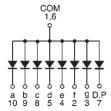
### Pin assignments



Pin No.	Function
1	Common
2	Segment "f"
3	Segment "g"
4	Segment "e"
5	Segment "d"
6	Common
7	D.P
8	Segment "c"
9	Segment "b"
10	Segment "a"

LED displays LA-401 DN Series

●Internal circuit schematic (example of common anode)



#### ● Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Orange	Yellow	Green	Unit	
	Symbol	LA-401VD / VN	Onit				
Power dissipation	P□	320	320	320	480	mW	
Power dissipation	Po / seg	40	40	40	60	mW	
Forward current	lF	15	15	15	20	mA	
Peak forward current	IFP	60*	60*	60*	60*	mA	
Reverse voltage	VR	3	3	3	3	V	
Operating temperature	Topr		°C				
Storage temperature	Tstg		°C				

<sup>\*</sup> Pulse width 1ms duty 1 / 5

#### • Electrical and optical characteristics (Ta = 25°C)

Parameter Symbol	Symbol	Conditions	Red		Orange		Yellow		Green			Unit			
	Conditions	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Offic	
Forward voltage	VF	I=10mA	_	2.0	2.8	_	2.0	2.8	_	2.1	2.8	_	2.1	2.8	٧
Reverse current	IR	V <sub>R</sub> =3V	_	_	100	_	_	100	_	_	100	_	_	100	μΑ
Peak wavelength	λР	I <sub>F</sub> =10mA	_	650	-	_	610	_	_	585	_	_	563	_	nm
Spectral line half width	Δλ	I <sub>F</sub> =10mA	_	40	_	_	40	_	_	40	_	_	40	_	nm

ONot designed for radiation resistance.

#### Luminous intensity

Color	λР	Туре	Min.	Тур.	Max.	Unit
Red	650	LA-401VD	5.6	16	_	mcd
ried	030	LA-401VN	5.6			
Orange	610	LA-401DD	3.6	10	_	mcd
		LA-401DN	3.0			
Yellow	585	LA-401YD	3.6	10	_	mcd
		LA-401YN	3.0			IIICG
Green	563	LA-401MD	5.6	16		mcd
		LA-401MN	5.6			IIICU

Note: Measured at IF = 10 mA