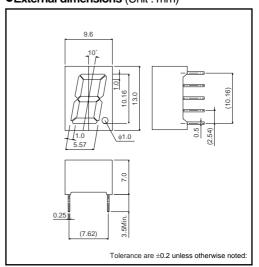
# Single Digit LED Numeric Display LA-401 D / N Series

LA-401 D / N series is developed because of the demand for small single digit LED Numeric Display. Materials of emission are GaAsP on GaP, AlGalnP GaP and GaN. This is the height of a letter 10.16mm, single digit LED Numeric Display that is packed by EPOXY resin.

#### Features

- 1) The height of a letter is 10.16mm.
- 2) Dimension is 9.6×13.0×7.0mm.
- The package of surface color is black. Color of segment is colored in emitting color. (Blue color is only milky white)
- 4) Each color has anode common and cathode common respectively.

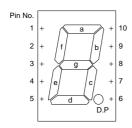
## ●External dimensions (Unit : mm)



## Selection guide

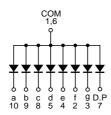
Emitting color Common	l Rad	Red High brightness	Orange High brightness	Yellow High brightness	Green	Blue	
Anode	LA-401VD	LA-401AD	LA-401ED	LA-401XD	LA-401MD	LA-401BD	
Cathode	LA-401VN	LA-401AN	LA-401EN	LA-401XN	LA-401MN	LA-401BN	

#### Pin assignments

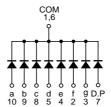


Pin No.	Function				
1	Common				
2	Segment "f"				
3	Segment "g"				
4	Segment "e"				
5	Segment "d"				
6	Common				
7	D.P				
8	Segment "c"				
9	Segment "b"				
10	Segment "a"				

# ●Equivalent circuit (anode common)



# (cathode common)



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

Parameter	Symbol	Red	Red High brightness	Orange High brightness	Yellow High brightness	Green	Blue	Unit	
	,	LA-401VD / VN	LA-401AD / AN	LA-401ED / EN	LA-401XD / XN	LA-401MD / MN	LA-401BD / BN		
Power dissipation	P□	320	520	520	520	480	336	mW	
Power dissipation	P <sub>D</sub> / seg	40	65	65	65	60	42	mW	
Forward current	I <sub>F</sub>	15	25	25	25	20	10	mA	
Peak forward current	<b>I</b> FP	60 *1	50 *2	50 *2	50 *2	60 *1	50 *2	mA	
Reverse voltage	V <sub>R</sub>	5	5	5	5	5	5	V	
Operating temperature	Topr	-25 to +75							
Storage temperature	Tstg		−30 to +85						

<sup>\*1</sup> Pulse width 1ms Duty 1 / 5 \*2 Pulse width 0.1ms Duty 1 / 10

# ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Red		Red High brightness		Orange High brightness		Yellow High brightness		Green		Blue		Unit
			Тур.	Max.	Тур.	Max.	Тур.	Max.	Тур.	Max.	Тур.	Max.	Тур.	Max.	
Forward voltage	VF	I <sub>F</sub> =10mA	2.0	2.8	2.05*	2.6*	2.05*	2.6*	2.05*	2.6*	2.1	2.8	3.6	4.2	V
Reverse current	IR	Vr=3V	-	100	-	100	_	100	-	100	_	100	_	100	μΑ
Peak wavelength	λР	I <sub>F</sub> =10mA	650	-	626 *	_	610*	-	589 *	-	563	-	470	-	nm
Spectral line half width	Δλ	I <sub>F</sub> =10mA	40	-	18 *	-	17 *	-	15 *	-	40	-	26	-	nm

## Luminous intensity

Color	λ <sub>P</sub> (nm)	Туре	Min.	Тур.	Unit	
Red	650	LA-401VD	5.6	16	mcd	
Neu	030	LA-401VN	5.0	10	IIICU	
High	626	LA-401AD	36	90	mcd	
brightness red	020	LA-401AN	36	90	mca	
High	610	LA-401ED	36	90	mcd	
brightness orange	010	LA-401EN	36	90	IIICU	
High	589	LA-401XD	36	90	mcd	
brightness yellow	309	LA-401XN	36	90	IIICa	
Green	563	LA-401MD	5.6	16	mcd	
	303	LA-401MN	3.6	16	IIICa	
Blue	470	LA-401BD	14	56	mcd	
	470	LA-401BN	14	36	mca	

OA condition of measurement is I<sub>F</sub>=10mA.

<sup>○</sup> The products are not radiations resistant.
\*Shows the number on the condition of I<sub>F</sub>=20mA.

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