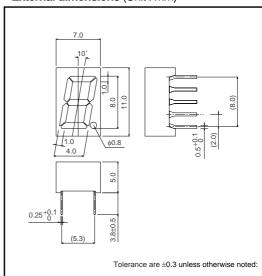
Single Digit LED Numeric Display LA-301 B / L Series

LA-301 B / L 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 8mm, single digit LED Numeric Display that is packed by epoxy resin.

Features

- 1) The height of a letter is 8mm.
- 2) The light don't leak from the segment in spite of the small package.
- 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.

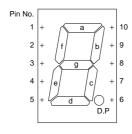
●External dimensions (Unit : mm)



Selection guide

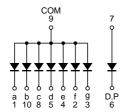
Emitting color Common	Red	Red (High brightness)	Orange (High brightness)	Yellow (High brightness)	Green	Blue
Anode	LA-301VB	LA-301AB	LA-301EB	LA-301XB	LA-301MB	LA-301BB
Cathode	LA-301VL	LA-301AL	LA-301EL	LA-301XL	LA-301ML	LA-301BL

Pin assignments

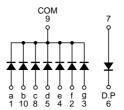


Pin No.	Function
1	Segment "a"
2	Segment "f"
3	Segment "g"
4	Segment "e"
5	Segment "d"
6	D.P Cathode
7	D.P Anode
8	Segment "c"
9	Common
10	Segment "b"

●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-301VB / VL	LA-301AB / AL	LA-301EB / EL	LA-301XB / XL	LA-301MB / ML	LA-301BB / BL		
Power dissipation	PD	320	520	520	520	480	336	mW	
Power dissipation	P⊳ / seg	40	65	65	65	60	42	mW	
Forward current	lF	15	25	25	25	20	10	mA	
Peak forward current	I _{FP}	60 *1	50 *2	50 *2	50 *2	60 *1	50 *2	mA	
Reverse voltage	VR	5	5	5	5	5	5	V	
Operating temperature	Topr		-25 to +75						
Storage temperature	Tstg		−30 to +85						

●Electrical characteristics (Ta=25°C)

Parameter	Symbol C	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.	1
Forward voltage	VF	I _F =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	I _R	V _R =3V	_	100	-	100	-	100	-	100	_	100	_	100	μΑ
Peak wavelength	λР	I=10mA	650	-	626*	-	610*	-	589*	-	563	-	470	-	nm
Spectral line half width	Δλ	I _F =10mA	40	-	18 *	_	17 *	_	15 *	-	40	-	26	-	nm

 [○]The products are not radiations resistant.
 * Shows the number on the condition of I_F=20mA.

Luminous intensity

Color	λ _P (nm)	Туре	Min.	Тур.	Unit	
Red	650	LA-301VB	3.6	10	mcd	
Red	630	LA-301VL	3.6	10	IIICu	
Dod (High brightness)	626	LA-301AB	36	90	mcd	
Red (High brightness)	020	LA-301AL	36	90	nica	
Orange (High brightness)	610	LA-301EB	36	90	mcd	
	010	LA-301EL	36	90		
Yellow (High brightness)	589	LA-301XB	36	90	mcd	
reliow (Figh brightness)	589	LA-301XL	36	90	nica	
Green	563	LA-301MB	3.6	10		
	303	LA-301ML	3.6	10	mcd	
Blue	470	LA-301BB	14	56	mad	
	470	LA-301BL	14	96	mcd	

^{*1} Pulse width 1ms Duty 1 / 5 *2 Pulse width 0.1ms Duty 1 / 10

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