High efficiency, single-digit numeric displays

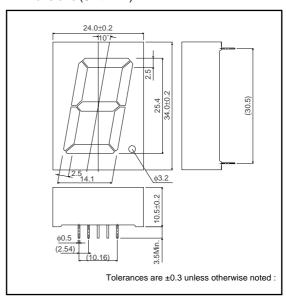
LA-101AK Series

The LA-101AK series are LED numerical displays designed to allow use even in bright locations. The height of the character is 25.4 mm, and two colors are available: red and green. These displays are designed for use in large numerical displays.

Features

- 1) Height of character: 25.4 mm
- 2) Dimensions: 24 x 34 x 10.5 mm
- 3) A common anode configuration and a common cathode configuration are available for each color.
- 4) The package surface is painted black and the segments are colored the display color.
- 5) High luminance, clear display.

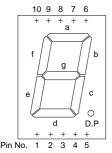
●Dimensions (Unit: mm)



Selection guide

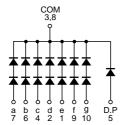
Emitting color Common	Red	Green
Anode	LA-101VA	LA-101MA
Cathode	LA-101VK	LA-101MK

Pin assignments



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

●Internal circuit schematic (example of common cathode)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	Green	Unit
- arameter	Gymbol	LA-101VA / VK	Oill	
Power dissipation PD		640	640	mW
Power dissipation	P⊳ / seg	85 (45)	85 (45)	mW
Forward current	lF	15	20	mA
Peak forward current	I FP	60*	60*	mA
Reverse voltage	VR	3	3	V
Operating temperature	Topr	-25 to +75		°C
Storage temperature	Tstg	-30 to +85		°C

^{*} Pulse width 1ms duty 1 / 5 () is D.P value

●Electrical and optical characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Elements	Red			Green			Unit
Parameter				Min.	Тур.	Max.	Min.	Тур.	Max.	Offic
	.,	I=10mA	2	-	4.0*1	5.6 ^{*1}	_	4.2*1	5.6 ^{*1}	V
Forward voltage	VF		1	ı	2.0*2	2.8*2	_	2.1 ^{*2}	2.8*2	
Reverse current	IR	VR=3V	_	ı	_	100	_	_	100	μΑ
Peak wavelength	λР	I _F =10mA	_	_	650	-	_	563	-	nm
Spectral line half width	Δλ	I _F =10mA	_	-	40	_	_	40	-	nm

O Not designed for radiation resistance.

The forward voltage and reverse current values are the guaranteed values per element.

Luminous intensity

Color	λР	Туре	Min.	Тур.	Max.	Unit
Red	650	LA-101VA	3.6	10	-	mcd
		LA-101VK				
Green	563	LA-101MA	5.6	16	-	mcd
		LA-101MK				

Note: Measured at Ir=10mA

•Electrical and optical characteristic curves

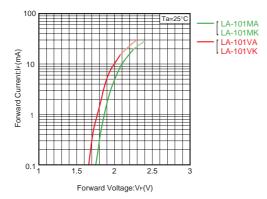


Fig.1 Forward Current - Forward Voltage

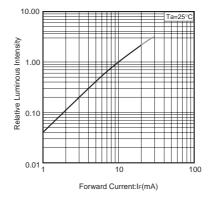


Fig.2 Relative Luminous Intensity - Forward Current

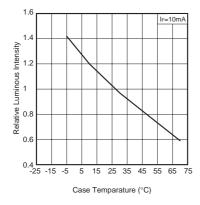


Fig.3 Relative Luminous Intensity - Case Temperature

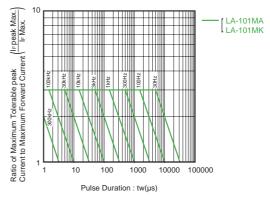


Fig.4 Ratio of Maximum Tolerable Peak Current - Pulse Duration (I)

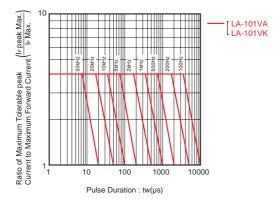


Fig.5 Ratio of Maximum Tolerable Peak Current - Pulse Duration (II)

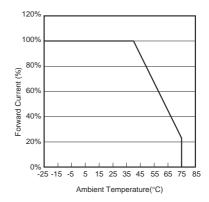


Fig.6 Derating

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