

High efficiency, single-digit numeric displays

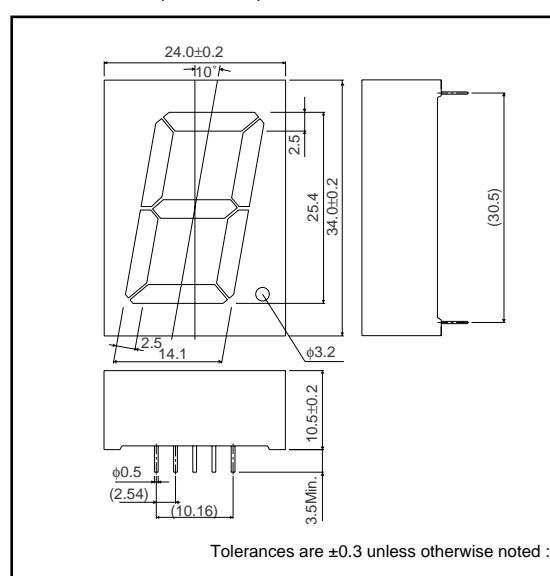
LA-101AK Series

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.

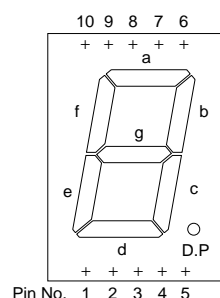
●Dimensions (Unit : mm)



●Selection guide

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

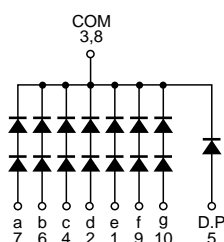
●Pin assignments



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"

LED displays

●Internal circuit schematic (example of common cathode)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	Green	Unit
		LA-101VA / VK	LA-101MA / MK	
Power dissipation	P _D	640	640	mW
Power dissipation	P _D / seg	85 (45)	85 (45)	mW
Forward current	I _F	15	20	mA
Peak forward current	I _{FP}	60*	60*	mA
Reverse voltage	V _R	3	3	V
Operating temperature	T _{opr}	-25 to +75		°C
Storage temperature	T _{stg}	-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
				Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V _F	I _F =10mA	2	—	4.0 ^{*1}	5.6 ^{*1}	—	4.2 ^{*1}	5.6 ^{*1}	V
			1	—	2.0 ^{*2}	2.8 ^{*2}	—	2.1 ^{*2}	2.8 ^{*2}	
Reverse current	I _R	V _R =3V	—	—	—	100	—	—	100	μA
Peak wavelength	λ _P	I _F =10mA	—	—	650	—	—	563	—	nm
Spectral line half width	Δλ	I _F =10mA	—	—	40	—	—	40	—	nm

© Not designed for radiation resistance.

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

●Luminous intensity

Color	λ _P	Type	Min.	Typ.	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 I_F=10mA

LED displays

●Electrical and optical characteristic curves

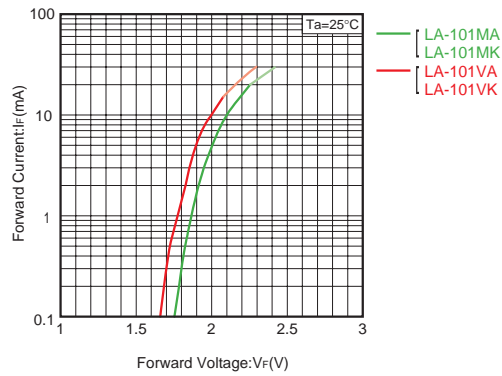


Fig.1 Forward Current - Forward Voltage

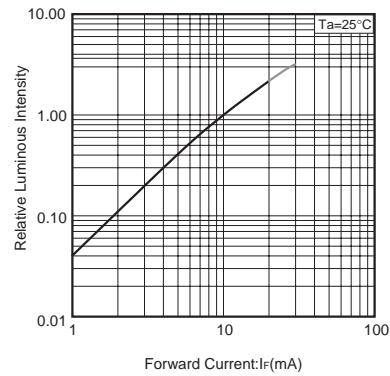


Fig.2 Relative Luminous Intensity - Forward Current

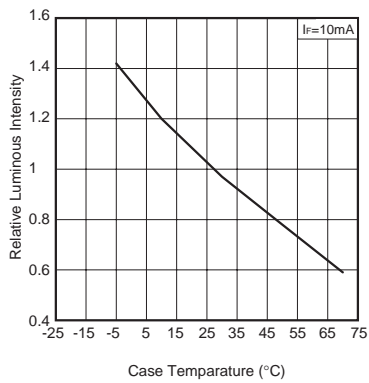


Fig.3 Relative Luminous Intensity - Case Temperature

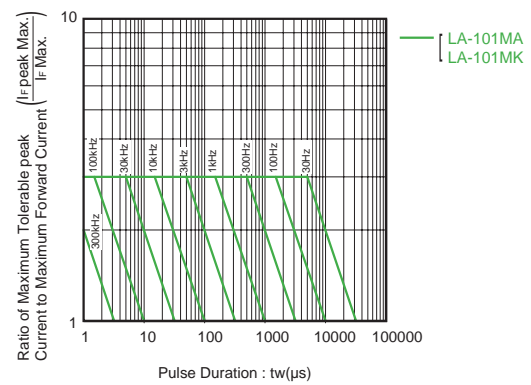


Fig.4 Ratio of Maximum Tolerable Peak Current - Pulse Duration (I)

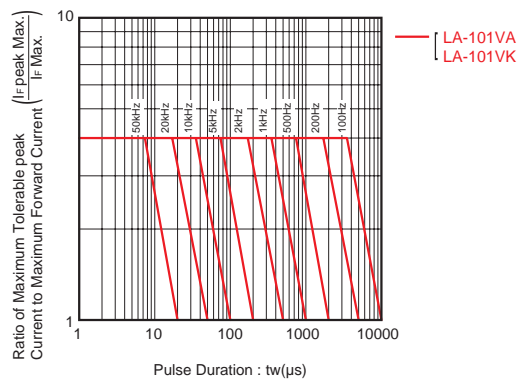


Fig.5 Ratio of Maximum Tolerable Peak Current - Pulse Duration (II)

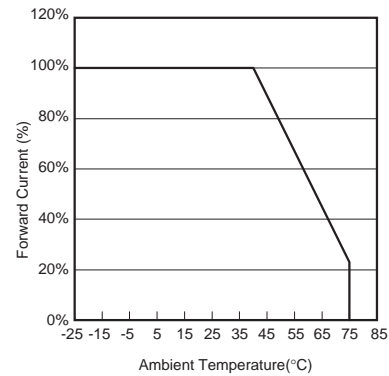


Fig.6 Derating

Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard use and operation. Please pay careful attention to the peripheral conditions when designing circuits and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or otherwise dispose of the same, no express or implied right or license to practice or commercially exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

It is our top priority to supply products with the utmost quality and reliability. However, there is always a chance of failure due to unexpected factors. Therefore, please take into account the derating characteristics and allow for sufficient safety features, such as extra margin, anti-flammability, and fail-safe measures when designing in order to prevent possible accidents that may result in bodily harm or fire caused by component failure. ROHM cannot be held responsible for any damages arising from the use of the products under conditions out of the range of the specifications or due to non-compliance with the NOTES specified in this catalog.

Thank you for your accessing to ROHM product informations.

More detail product informations and catalogs are available, please contact your nearest sales office.

ROHM Customer Support System

THE AMERICAS / EUROPE / ASIA / JAPAN

www.rohm.com

Contact us : webmaster@rohm.co.jp

AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit www.ameya360.com

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

➤ Customer Service :

Email service@ameya360.com

➤ Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com