

LF-301 A / K series of Single Digit Surface Mount LED Numeric Display which the height of a letter 8mm have ROHM original structure that realizes re-flow soldering.

- 1) Re-flow soldering *
- 2) Pb-free available
- 3) Automatic mounting with taping pack

*Number of re-flow process shall be recommend 1 time by our re-flow condition.

Emitting color Common	Red	Green
Anode	LF-301VA	LF-301MA
Cathode	LF-301VK	LF-301MK

10 9 8 7 6
+ + + + +

a b c d e
f g h i j
D.P.

Pin No. 1 2 3 4 5

Common

8 3

Segment PIN No.

a b c d e f g D.P

7 6 4 2 1 9 10 5

Technical drawing of a 10-pin connector. The drawing includes a top view, a side view, and a cross-sectional view.

Top View Dimensions:

- Total width: 13
- Pin pitch: 2.5
- Pin diameter: $\phi 0.8$
- Pin length: 10
- Pin No. 1, Pin No. 5, Pin No. 6, Pin No. 10

Side View Dimensions:

- Height: 5
- Pin height: 0.2

Cross-sectional View Dimensions:

- Pin diameter: $\phi 0.8$
- Pin length: 10

Tolerance are ± 0.3 unless otherwise noted

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"

Common

8 3

a b c d e f g D.P.

7 6 4 2 1 9 10 5

LED displays

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	Green	Unit
		LF-301VA / VK	LF-301MA / MK	
Power dissipation	P _D	320	480	mW
Power dissipation	P _D / seg	40	60	mW
Forward current	I _F	15	20	mA
Peak forward current	I _{FP}	60 *	60 *	mA
Reverse voltage	V _R	5	5	V
Operating temperature	T _{opr}	-25 to +75		°C
Storage temperature	T _{stg}	-30 to +85		°C

*Pulse width 1ms Duty 1 / 5

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Red		Green		Unit
			Typ.	Max.	Typ.	Max.	
Forward voltage	V _F	I _F =10mA	2.0	2.8	2.1	2.8	V
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

© The products are not radiations resistant.

●Luminous intensity

Color	λ _P (nm)	Type	Min.	Typ.	Unit
Red	650	LF-301VA	3.6	10	mcd
		LF-301VK			
Green	563	LF-301MA	3.6	10	mcd
		LF-301MK			

LED displays

●Electrical and optical characteristic curves

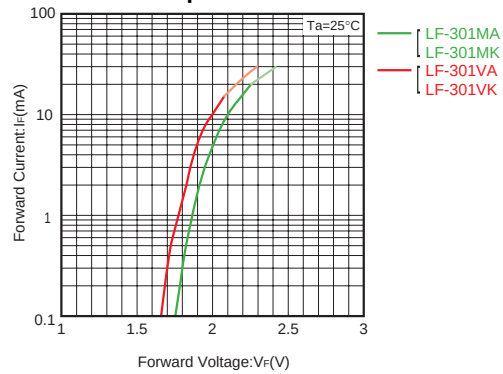


Fig.1 Forward Current - Forward Voltage

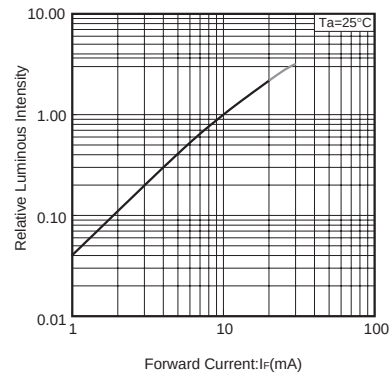


Fig.2 Relative Luminous Intensity - Forward Current

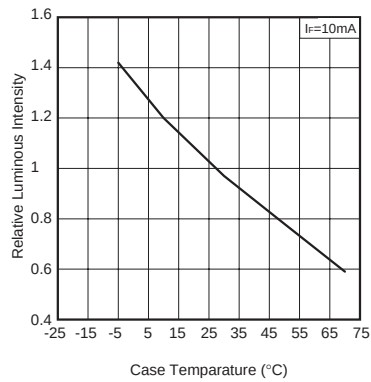


Fig.3 Relative Luminous Intensity - Case Temperature

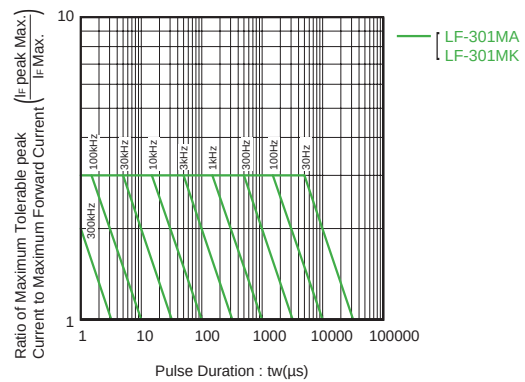


Fig.4 Ratio of Maximum Tolerable Peak Current - Pulse Duration (I)

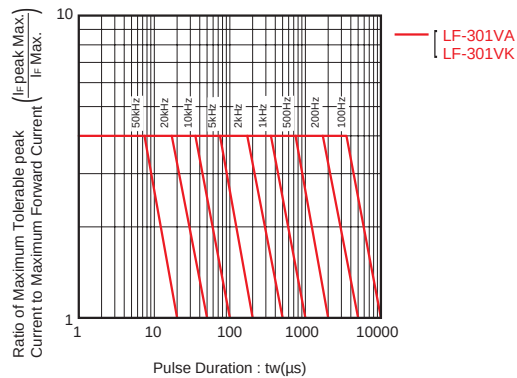


Fig.5 Ratio of Maximum Tolerable Peak Current - Pulse Duration (II)

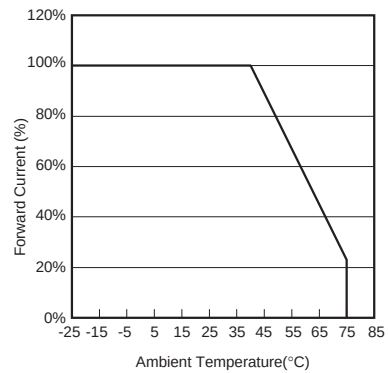


Fig.6 Derating

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