

High efficiency, single-digit numeric displays

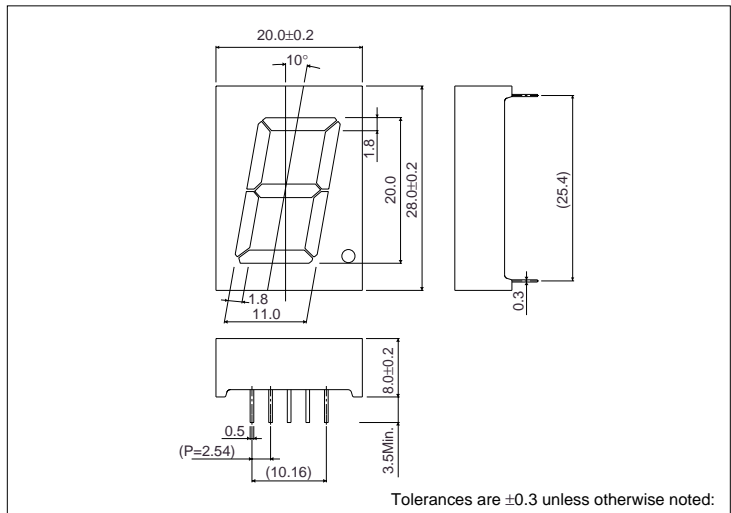
LA-801FP Series

The LA-801FP series are LED numeric displays designed to be used in bright locations. The height of the character is 20mm, and two colors are available: red and green. These displays have been designed for use as large numeric displays in game machines and other applications.

●Features

- 1) Height of character: 20 mm.
- 2) External dimensions: 20 x 28 x 8 mm
- 3) Common anode and common cathode configurations are available for each color.
- 4) The package surface is painted black and the segments are colored the display color.
- 5) High luminosity, clear display.
- 6) Convenient pin layout for designing the printed circuit board pattern.

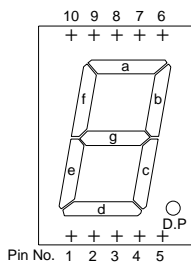
●External dimensions (Units : mm)



●Selection guide

Emitting color	Red	Green
	Common	
Anode	LA-801VF	LA-801MF
Cathode	LA-801VP	LA-801MP

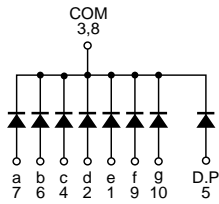
●Pin assignments



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-801VF / VP	LA-801MF / MP	
Power dissipation	P_D	480	480	mW
Power dissipation	P_D / seg	60	60	mW
Forward current	I_F	20	20	mA
Peak forward current	I_{FP}	60*	60*	mA
Reverse voltage	V_R	3	3	V
Operating temperature	T_{opr}	-25~+75		°C
Storage temperature	T_{stg}	-30~+85		°C

* Pulse width 1ms duty 1 / 5

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

Parameter	Symbol	Conditions	Red			Green			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V_F	$I_F = 10\text{mA}$	-	2.0	2.8	-	2.1	2.8	V
Reverse current	I_R	$V_R = 3\text{V}$	-	-	100	-	-	100	μA
Peak wavelength	λ_P	$I_F = 10\text{mA}$	-	650	-	-	563	-	nm
Spectral line half width	$\Delta\lambda$	$I_F = 10\text{mA}$	-	40	-	-	40	-	nm

© Not designed for radiation resistance.

● Luminous intensity

Color	λ_P	Type	Min.	Typ.	Max.	Unit
Red	650	LA-801VF	3.6	10	-	mcd
		LA-801VP				
Green	563	LA-801MF	3.6	10	-	mcd
		LA-801MP				

Note : Measured at $I_F = 10\text{mA}$