LED displays

High efficiency, two-digit numeric displays

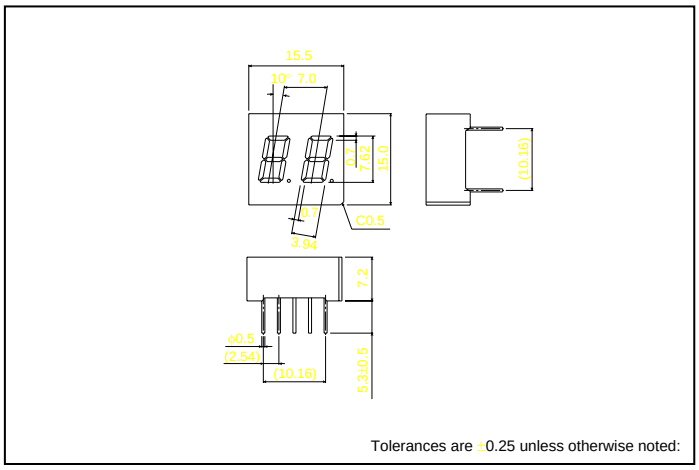
LB-302FP Series

The LB-302FP series were designed to meet the need for multi-digit numeric displays. These two-digit LED numeric displays have a character height of 7.62 mm.

●Features

1) Height of character : 7.62 mm
2) High efficiency in a compact package.
3) Common anode and common cathode configurations are available for red, orange and green.
4) The package surface is painted black and the segments are milky white.

●External dimensions (Units : mm)

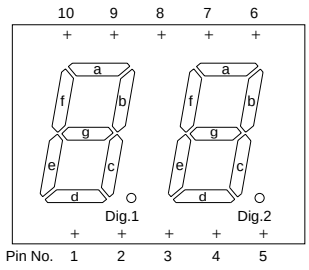


●Selection guide

Emitting color / Common	Red	Orange	Green
Anode	LB-302VF	LB-302DF*	LB-302MF
Cathode	LB-302VP	LB-302DP*	LB-302MP

*Order-based production.

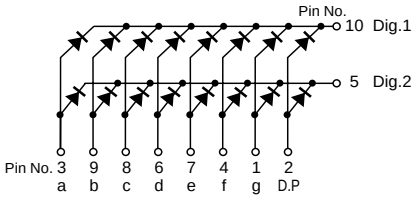
●Pin assignments



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

LED displays

●Internal circuit schematic (example of common cathode)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Orange	Green	Unit
		LB-302VF / VP	LB-302DF / DP	LB-302MF / MP	
Power dissipation	P_D	800	800	960	mW
Power dissipation	P_D / seg	50	50	60	mW
Forward current	I_F	15	15	20	mA
Peak forward current	I_{FP}	60*	60*	60*	mA
Reverse voltage	V_R	5	5	5	V
Operating temperature	Topr	–25~+75			°C
Storage temperature	Tstg	–30~+85			°C

* Pulse width 1ms duty 1 / 5

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

Parameter	Symbol	Conditions	Red			Orange			Green			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V_F	I_F = 10mA	–	2.0	2.8	–	2.0	2.8	–	2.1	2.8	V
Reverse current	I_R	V_R = 5V	–	–	100	–	–	100	–	–	100	μA
Peak wavelength	λ_P	I_F = 10mA	–	650	–	–	610	–	–	563	–	nm
Spectral line half width	$\Delta\lambda$	I_F = 10mA	–	40	–	–	40	–	–	40	–	nm

◎ Not designed for radiation resistance.

● Luminous intensity

Color	λ_P	Type	Min.	Typ.	Max.	Unit
Red	650	LB-302VF / VP	2.2	6.3	–	mcd
Orange	610	LB-302DF / DP	2.2	6.3	–	mcd
Green	563	LB-302MF / MP	2.2	6.3	–	mcd

Note : Measured at I_F = 10mA

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