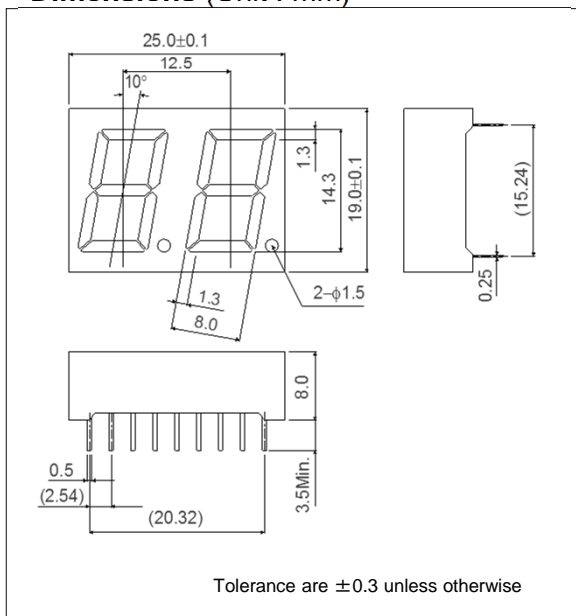


LB-602 A / K2 series is designed to use in the light. Materials of emission are GaAsP on GaP, AlGaInP GaP. This is the height of a letter 14.3mm, double digits LED Numeric Display that is packed by epoxy resin.

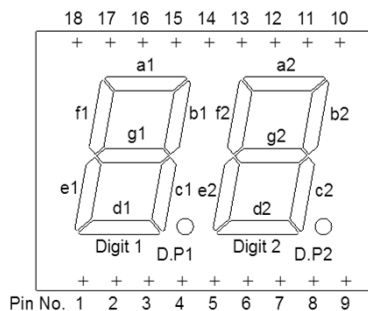
### ●Features

- 1) The height of a letter is 14.3mm.
- 2) Dimension is 25.0×19.0×8.0mm.
- 3) The package of surface color is black. Color of segment is colored in emitting color.
- 4) Each color has anode common and cathode common respectively.

### ●Dimensions (Unit : mm)



### ●Pin assignments

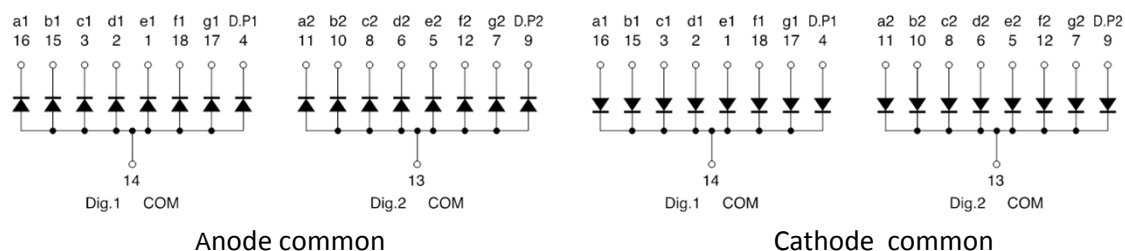


Pin No.	Function
1	Segment "e1"
2	Segment "d1"
3	Segment "c1"
4	D.P1
5	Segment "e2"
6	Segment "d2"
7	Segment "g2"
8	Segment "c2"
9	D.P2
10	Segment "b2"
11	Segment "a2"
12	Segment "f2"
13	Digit 2 Common
14	Digit 1 Common
15	Segment "b1"
16	Segment "a1"
17	Segment "g1"
18	Segment "f1"

### ●Selection guide

Emitting color	Red	Red (High brightness)	Orange (High brightness)	Yellow (High brightness)	Green
Common					
Anode	LB-602VA2	LB-602AA2	LB-602EA2	LB-602XA2	LB-602MA2
Cathode	LB-602VK2	LB-602AK2	LB-602EK2	LB-602XK2	LB-602MK2

### ●Internal circuit schematic



### ●Absolute maximum ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Red	Red (High brightness)	Orange (High brightness)	Yellow (High brightness)	Green	Unit
		LB-602VA2 / VK2	LB-602AA2 / AK2	LB-602EA2 / EK2	LB-602XA2 / XK2	LB-602MA2 / MK2	
Power dissipation	$P_D$	960	1040	1040	1040	960	mW
Power dissipation	$P_D / \text{seg}$	60	65	65	65	60	mW
Forward current	$I_F$	20	25	25	25	20	mA
Peak forward current	$I_{FP}$	60 * <sup>1</sup>	50 * <sup>2</sup>	50 * <sup>2</sup>	50 * <sup>2</sup>	60 * <sup>1</sup>	mA
Reverse voltage	$V_R$	5	5	5	5	5	V
Operating temperature	$T_{opr}$	-25 to +75					$^\circ\text{C}$
Storage temperature	$T_{stg}$	-30 to +85					$^\circ\text{C}$

\*1 Pulse width 1ms, duty 1 / 5

\*2 Pulse width 0.1ms, duty 1 / 10

### ●Electrical and optical characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Red		Red (High brightness)		Orange (High brightness)		Yellow (High brightness)		Green		Unit
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	
Forward voltage	$V_F$	$I_F = 10\text{mA}$	2.0	2.8	2.05*	2.6*	2.05*	2.6*	2.05*	2.6*	2.1	2.8	V
Reverse current	$I_R$	$V_R = 3\text{V}$	-	100	-	100	-	100	-	100	-	100	$\mu\text{A}$
Peak wavelength	$\lambda_p$	$I_F = 10\text{mA}$	650	-	626*	-	610*	-	589*	-	563	-	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	40	-	18*	-	17*	-	15*	-	40	-	nm

© Not designed for radiation resistance.

\* Shows the number on the condition of  $I_F = 20\text{mA}$ .

### ●Luminous intensity

Parameter	$\lambda_p$	Type	Min.	Typ.	Max.	Unit
Red	650	LB-602VA2	5.6	16	-	mcd
		LB-602VK2				
Red(High brightness)	626	LB-602AA2	36	90	-	mcd
		LB-602AK2				
Orange(High brightness)	610	LB-602EA2	36	90	-	mcd
		LB-602EK2				
Yellow(High brightness)	589	LB-602XA2	36	90	-	mcd
		LB-602XK2				
Green	563	LB-602MA2	9	25	-	mcd
		LB-602MK2				

© Condition  $I_F = 10\text{mA}$

●Electrical and optical characteristics curves

Fig.1 Forward Current vs. Forward Voltage

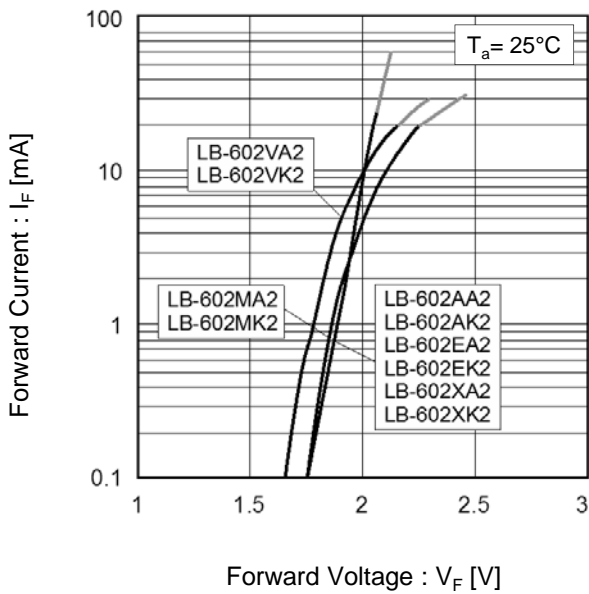


Fig.2 Relative Luminous Intensity vs. Forward Current

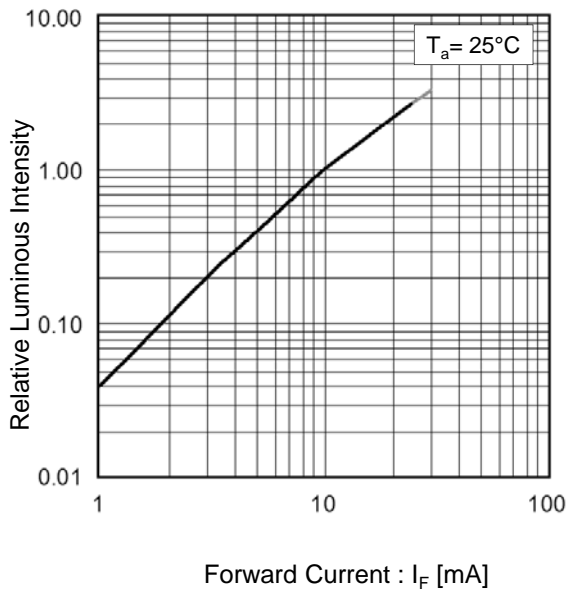


Fig.3 Relative Luminous Intensity vs. Case Temperature

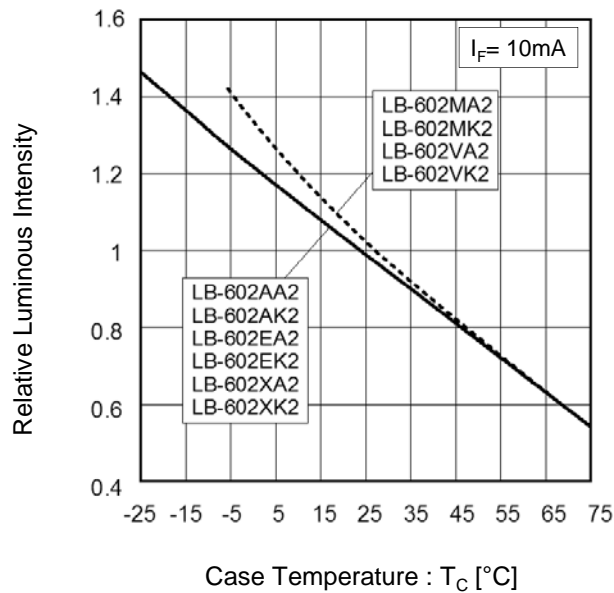
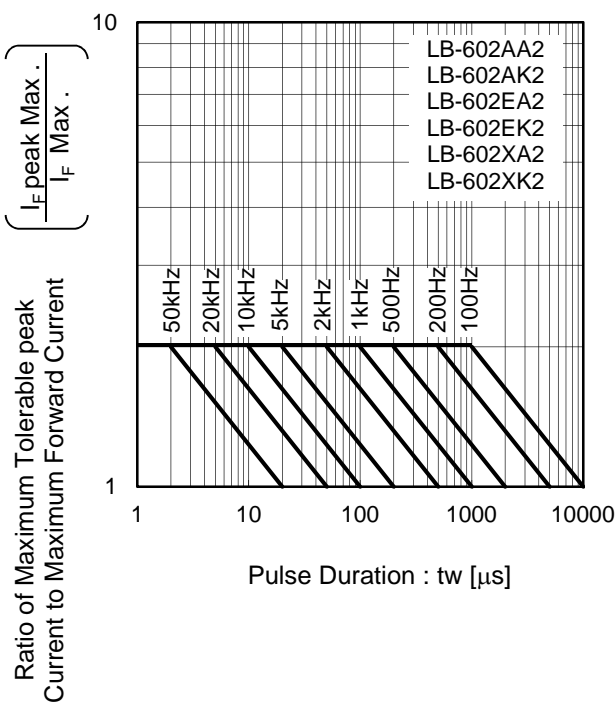


Fig.4 Ratio of Maximum Tolerable Peak Current vs. Pulse Duration



●Electrical and optical characteristics curves

Fig.5 Ratio of Maximum Tolerable Peak Current vs. Pulse Duration

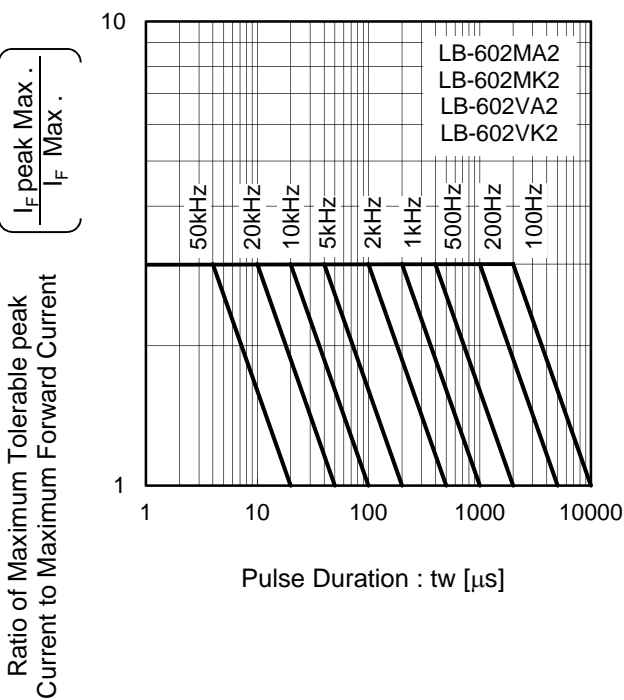
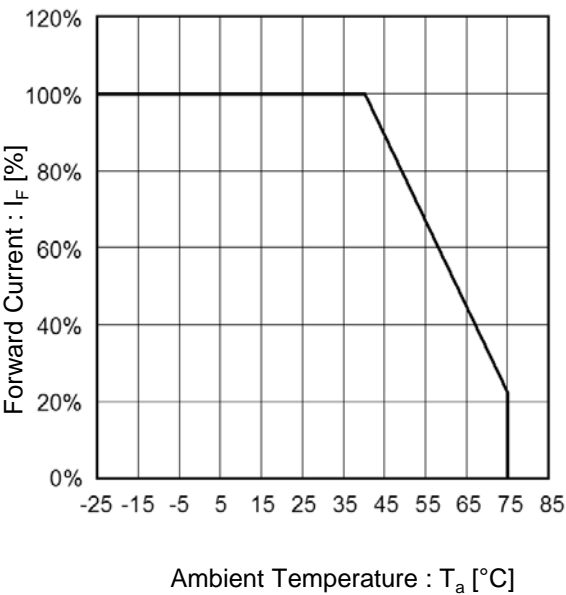


Fig.6 Derating



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## LB-602AK2 - Web Page

[Distribution Inventory](#)

Part Number	LB-602AK2
Package	LB-602AK2
Unit Quantity	300
Minimum Package Quantity	
Packing Type	Filmpack
Constitution Materials List	inquiry
RoHS	Yes