



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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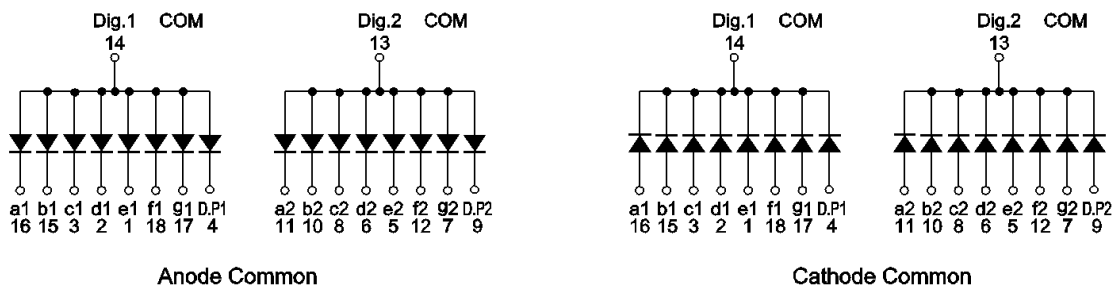
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●Internal circuit schematic



●Absolute maximum ratings (T<sub>a</sub> = 25°C)

Parameter	Symbol	Red	Green	Unit
		LB-402VD / VN	LB-402MD / MN	
Power dissipation	P <sub>D</sub>	640	960	mW
Power dissipation	P <sub>D</sub> / seg	40	60	mW
Forward current	I <sub>F</sub>	15	20	mA
Peak forward current	I <sub>FP</sub>	60 *	60 *	mA
Reverse voltage	V <sub>R</sub>	5	5	V
Operating temperature	T <sub>opr</sub>	-25 to +75		°C
Storage temperature	T <sub>stg</sub>	-30 to +85		°C

\* Pulse width 1ms, duty 1 / 5

●Electrical and optical characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Red			Green			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	2.0	2.8	-	2.1	2.8	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	-	-	100	-	-	100	μA
Peak wavelength	λ <sub>p</sub>	I <sub>F</sub> =10mA	-	650	-	-	563	-	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> =10mA	-	40	-	-	40	-	nm

© Not designed for radiation resistance.

●Luminous intensity

Parameter	λ <sub>p</sub>	Type	Min.	Typ.	Max.	Unit
Red	650	LB-402VD	5.6	16	-	mcd
		LB-402VN				
Green	563	LB-402MD	9.0	25	-	mcd
		LB-402MN				

© Condition I<sub>F</sub>=10mA



●Electrical and optical characteristics curves

Fig.1 Forward Current vs. Forward Voltage

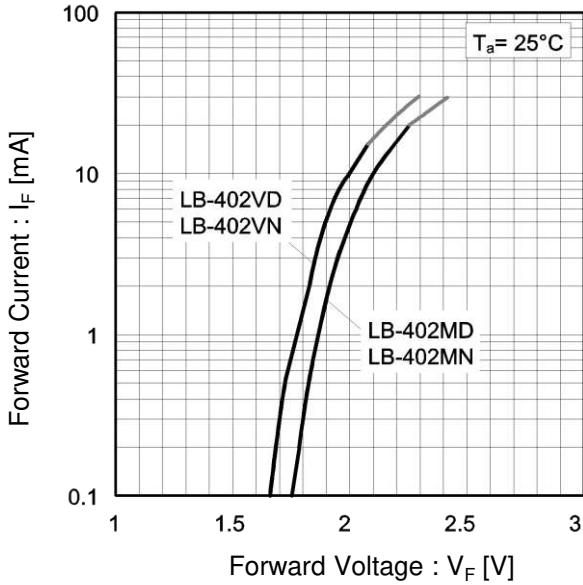


Fig.2 Relative Luminous Intensity vs. Forward Current

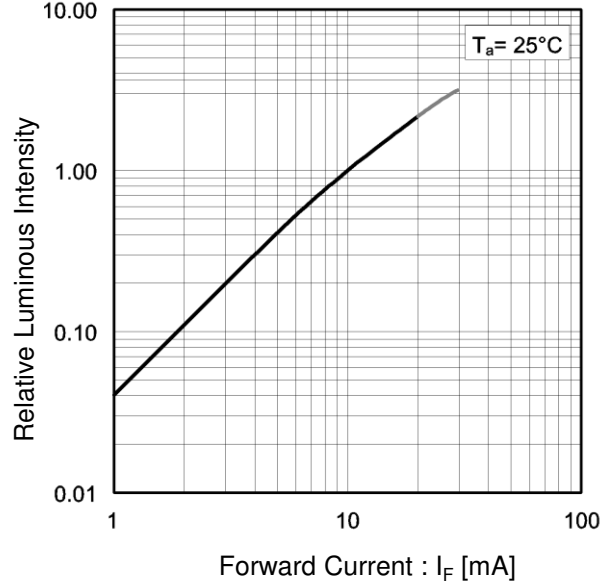


Fig.3 Relative Luminous Intensity vs. Case Temperature

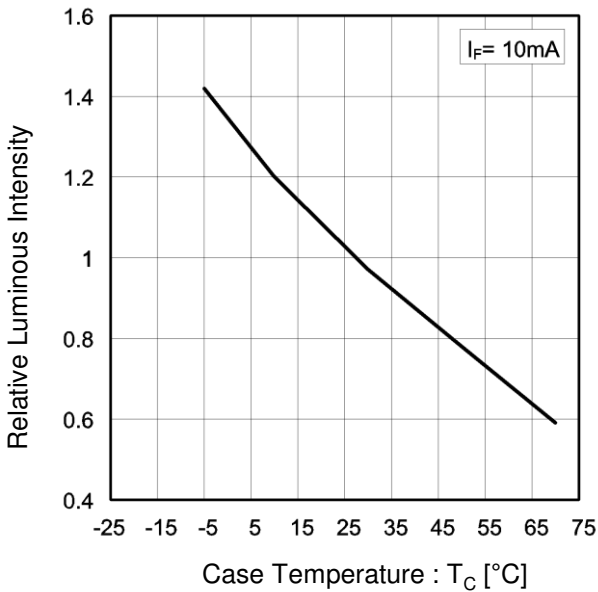
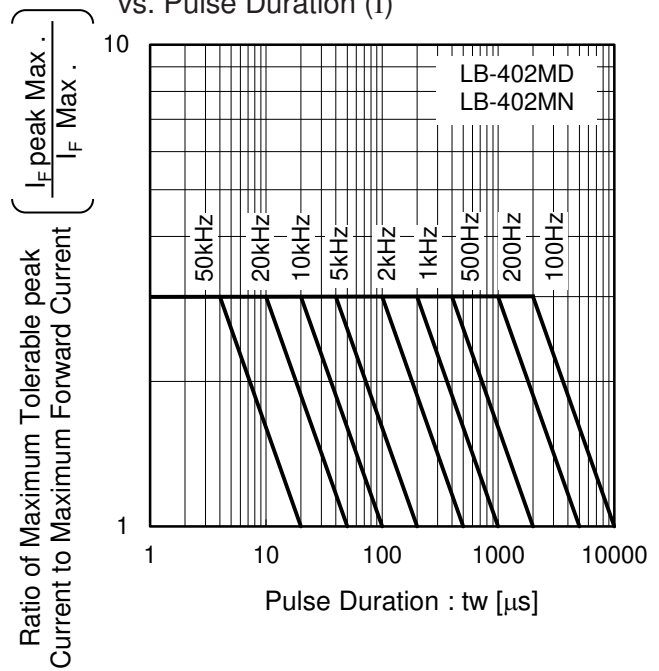


Fig.4 Ratio of Maximum Tolerable Peak Current vs. Pulse Duration (I)



●Electrical and optical characteristics curves

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

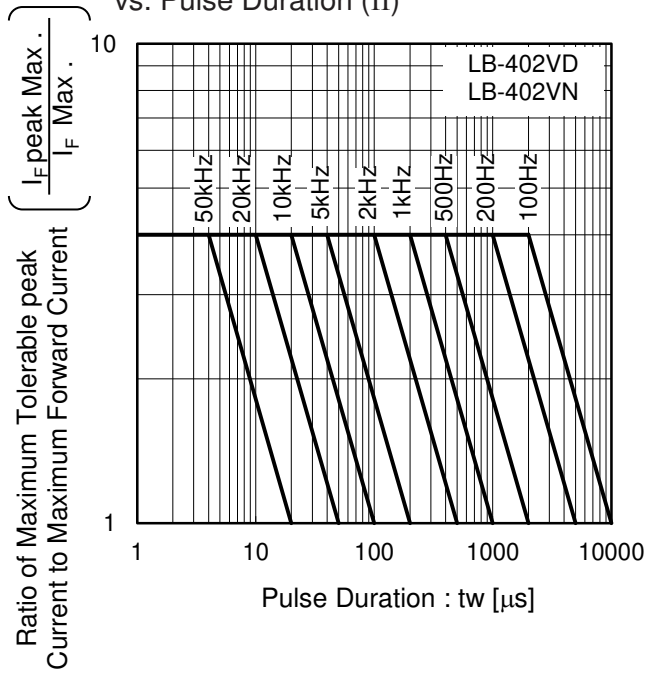
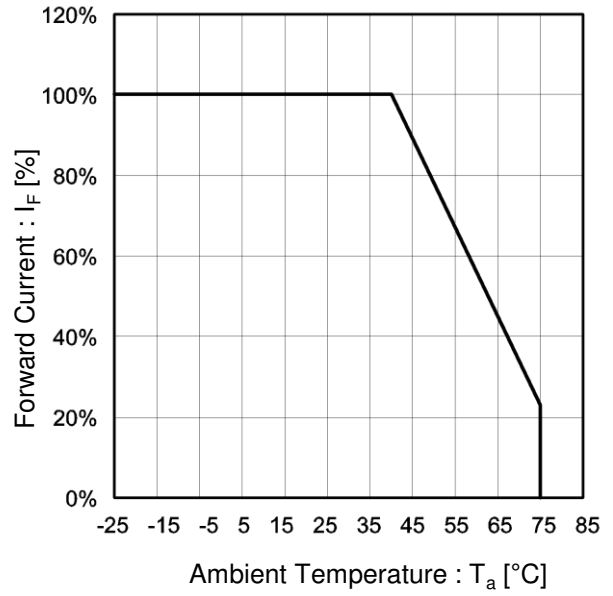


Fig.6 Derating



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