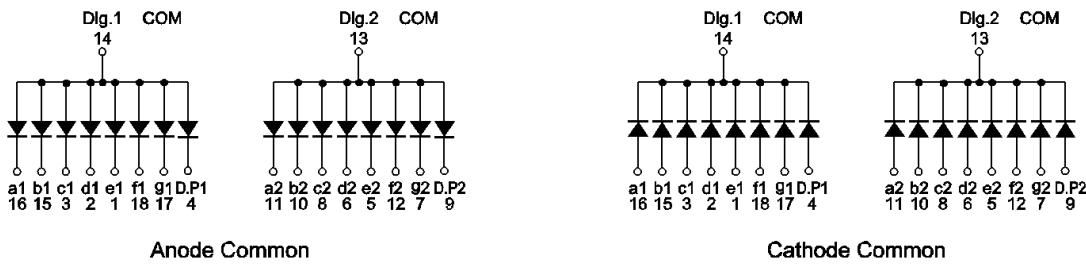




●Internal circuit schematic



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

Parameter	Symbol	Red	Green	Unit
		LB-502VD / VN	LB-502MD / MN	
Power dissipation	P <sub>D</sub>	960	960	mW
Power dissipation	P <sub>D</sub> / seg	60	60	mW
Forward current	I <sub>F</sub>	20	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> =5V	-	-	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-502VD	5.6	16	-	mcd
		LB-502VN				
Green	563	LB-502MD	9.0	25	-	mcd
		LB-502MN				

© Condition I<sub>F</sub>=10mA

●Electrical and optical characteristics curves

Fig.1 Forward Current vs. Forward Voltage

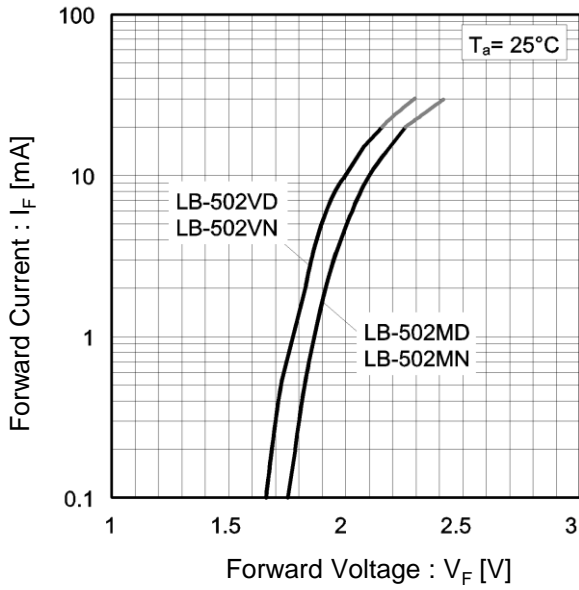


Fig.2 Relative Luminous Intensity vs. Forward Current

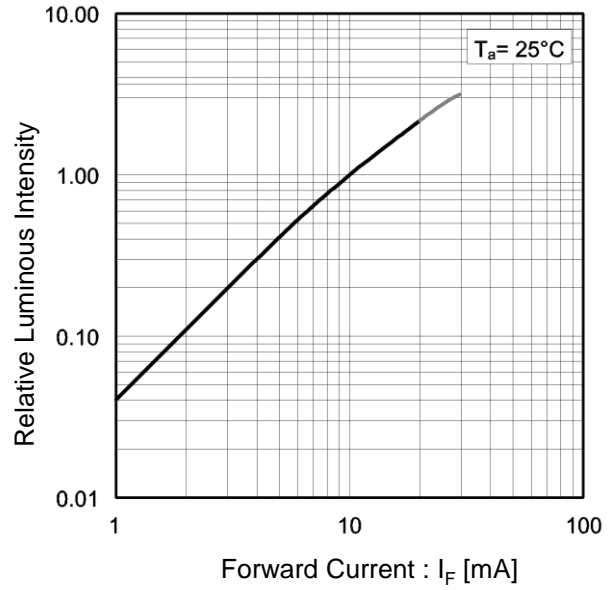


Fig.3 Relative Luminous Intensity vs. Case Temperature

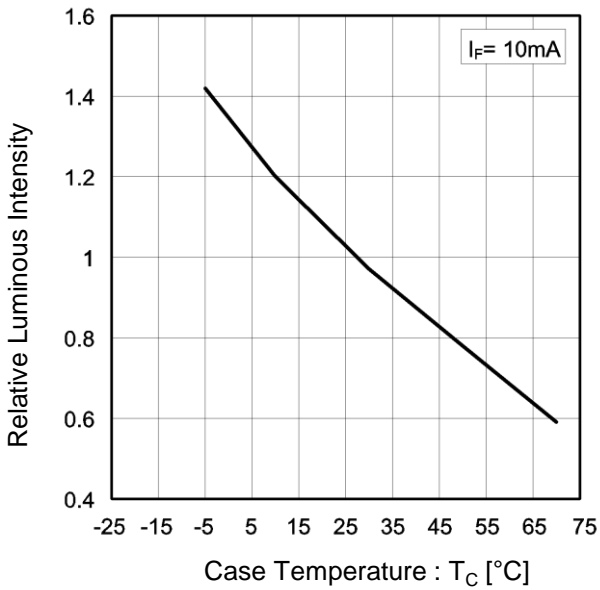
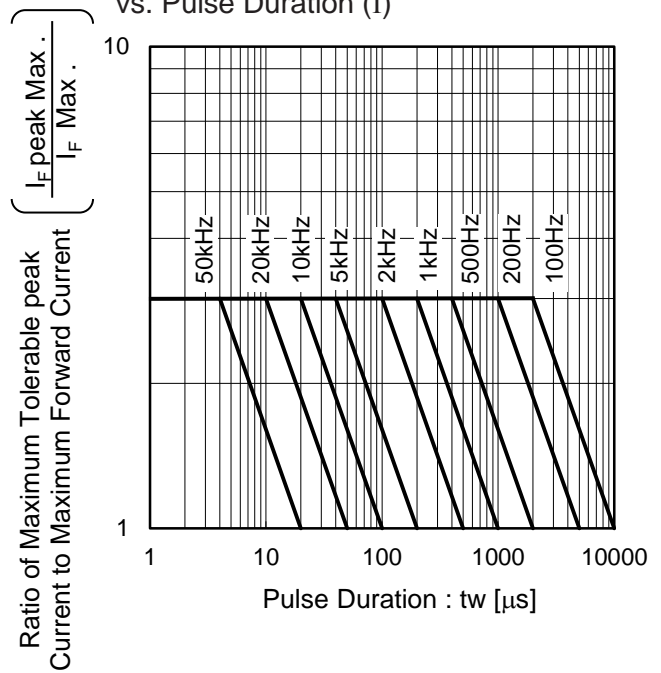
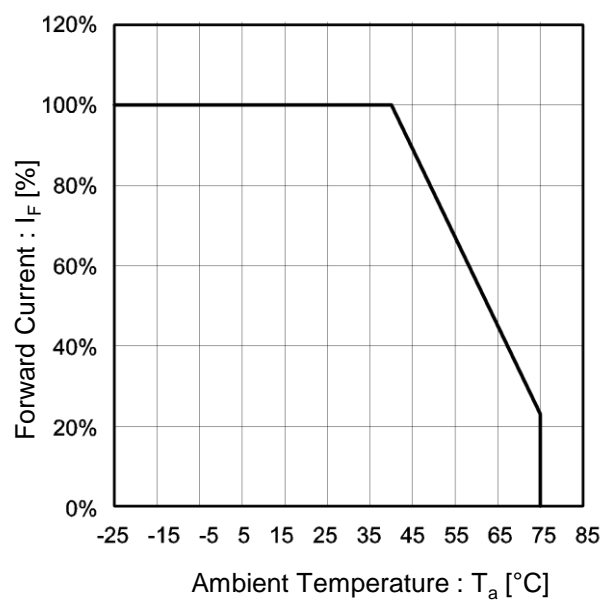


Fig.4 Ratio of Maximum Tolerable Peak Current vs. Pulse Duration (I)



## ●Electrical and optical characteristics curves

Fig.5 Derating



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