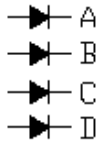
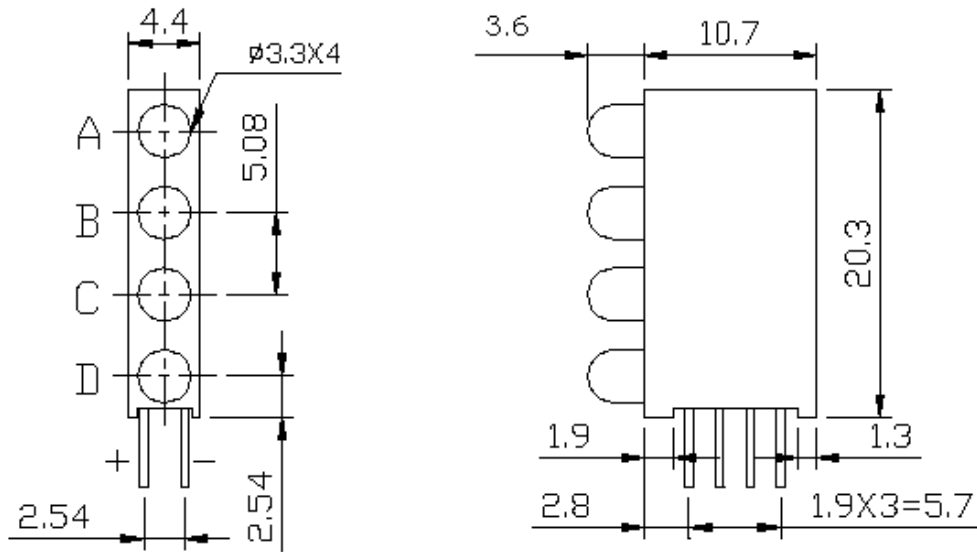


**SPECIFICATIONS** **CBQ33RRRD**
**PACKAGE OUTLINES**


(STANDARD TYPE UT LEAD)

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specification are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CBQ33RRRD	GaAsP/GaP	Red	Red Diffused	60°



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Max Rating	Unit
Forward current	I <sub>f</sub>	30	mA
Reverse current @ 5V	I <sub>r</sub>	10	μA
Power dissipation	P <sub>d</sub>	100	mW
Operating temperature range	T <sub>opr</sub>	-40~+80	°C
Storage temperature range	T <sub>stg</sub>	-40~+100	°C
Peak pulsing current (1/10 duty f= 10KHz)	I <sub>fp</sub>	160	mA
Soldering Temperature	T <sub>SOL</sub>	Max 260°C for 5 sec Max	

**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Wavelength at peak emission	λ <sub>peak</sub>	I <sub>F</sub> = 20mA	-	635	-	nm
Spectral half bandwidth	Δλ	I <sub>F</sub> = 20mA	-	45	-	nm
Dominant wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	-	625	-	nm
Forward Voltage	V <sub>f</sub>	I <sub>F</sub> = 20mA	1.7	2.0	2.8	V
Luminous intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	3	20	-	mcd
Viewing angle at 50% I <sub>v</sub>	2Θ ½	I <sub>F</sub> = 20mA	-	60	-	Deg

\*NOTE: 1. The forward voltage data did not including ±0.1V tolerance 2. The luminous intensity data did not including ±15% tolerance



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