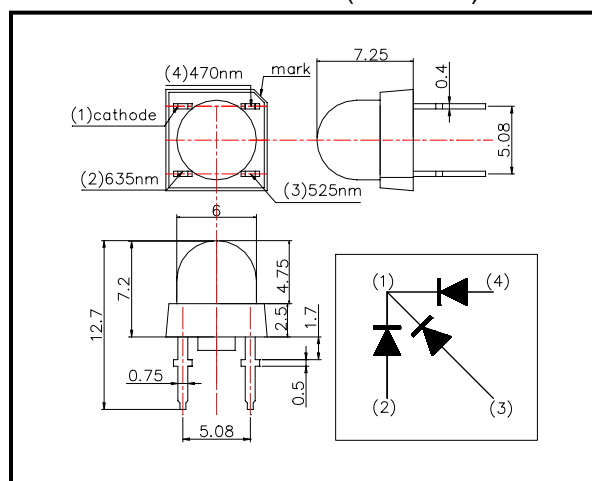


FLRGB-21 Super Beam type LED

FLRGB-21 consists of an RGB LEDs mounted on the lead frame and is molded with super beam lens.

On forward bias, it emits a band of peaks 470nm, 525nm and 635nm at cathode common.

◆ Outer dimension (Unit: mm)



◆ Specifications

- | | |
|---------------------|--------------------------|
| 1) Product Name | Epoxy mold type LED |
| 2) Type No. | FLRGB-21 |
| 3) Chip | |
| (1) Chip Material | InGaN, InGaAlP |
| (2) Peak Wavelength | 470nm, 525nm, 635nm typ. |
| 4) Package | |
| (1) Type | Super Beam type LED |
| (2) Resin Material | Clear Epoxy Resin |
| (3) Lead Frame | Silver Plated Copper |

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value			Unit
		470nm	525nm	635nm	
Power Dissipation	P _D	180	170	115	mW
Forward Current	I _F	40	40	50	mA
Reverse Voltage	V _R	5			V
Operating Temperature	T _{OPR}	-20 ~ +80			°C
Storage Temperature	T _{STG}	-30 ~ +80			°C
Soldering Temperature	T _{SOL}	240			°C

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum			Typical			Maximum			Unit
			470	525	635	470	525	635	470	525	635	
Forward Voltage	V _F	I _F =20mA				3.8	3.5	2.0	4.3	4.3	2.3	V
						4.1	4.0	2.1	4.5	4.4	2.4	
Reverse Current	I _R	V _R =5V							10			uA
Total Radiated Power	P _O	I _F =20mA				3.8	3.0	4.8				mW
						5.5	4.0	7.0				
Brightness	I _v	I _F =20mA				1.8	5.5	3.0				cd
						2.4	7.0	4.0				
Peak Wavelength	λ _P	I _F =30mA	460	515	625	470	525	635	480	535	645	nm
Half Width	Δλ	I _F =30mA				25	40	20				nm
Viewing Half Angle	θ _{1/2}	I _F =30mA				±10						deg.

‡Brightness is measured by Tektronix J-16.

‡Total Radiated Power is measured by Photodyne #500