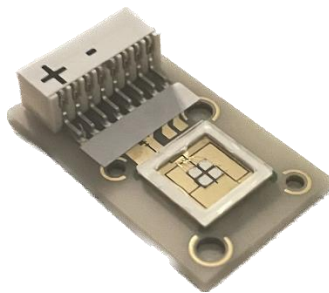


2616 UV COB

Datasheet

Part Number : 2616FLXXXXX000



Feature

- ✓ UV LED Array with 5.2 mm² emitting area
- ✓ High power density operation up to 4 A/mm²
- ✓ Available UVA wavelengths: 365 nm - 410 nm
- ✓ High thermal conductivity ALN ceramics package
- ✓ Environmentally friendly: REACH, RoHS and Halogen compliant



2616 UV COB Datasheet

■ Absolute Maximum Rating

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Absolute Maximum Current for 365nm	I_{max}			5	A
Absolute Maximum Current for 385~405nm	I_{max}			6	A
Storage temperature	T_{stg}	-40		100	°C
Operating temperature	T_{opr}	-20		70	°C
Solder temperature	T_{sol}	260°C , 10 sec			°C

■ Electro-Optical Characteristics (Ta : 25°C)

UV					
Parameter	Symbol	Value			Unit
Peak Wavelength Range(Note2)	λ	365-375	380-390	400-410	nm
Peak Wavelength(Note2)	λ_p	369	385	405	nm
Test Current for Binning(Note3)	IF	2.0	2.0	2.0	A
Radiometric Flux1,2	Φ_{typ}	3.6	4.8	5.0	W
FWHM at 50% of Φ_{v1}	$\Delta\lambda_{1/2}$	15	15	15	nm
Thermal Resistance	Rth	0.4	0.4	0.4	°C/m-K
Maximum Junction Temperature (Note4)	T_{Jmax}	115	125	125	°C
Forward Voltage(Note1)	$V_{F_{min}}$	6.5	6.3	6.4	V
	VF	9.0	8.8	8.8	V
	$V_{F_{max}}$	9.8	9.2	9.2	V

Notes:

1. Forward Voltage (V_f) measurement allowance is $\pm 0.4V$
2. Center Wavelength (W_c) measurement allowance is $\pm 1.5nm$
3. Test condition: 3A at time = 0.01 sec
4. When drive on maximum current , T_j must be kept below 125°C
5. Viewing angle($2\theta_{1/2}$) measurement allowance is $\pm 5^\circ$



2616 UV COB Datasheet

■ Binning Table for 365nm

Bin	P30W	P35W	P40W		
Po(W)	3.0-3.5	3.5-4.0	4.0-4.5		
Bin	V6	V8			
Vf(V)	6.0-8.0	8.0-10.0			
Bin	W365				
Wp(nm)	365~372				

Notes :

1. Test condition: 2 A at time = 0.01 sec
2. Tolerance of Radiometric Power (Po) $\pm 5\%$
3. Tolerance of Wavelength $\pm 1.5\text{nm}$

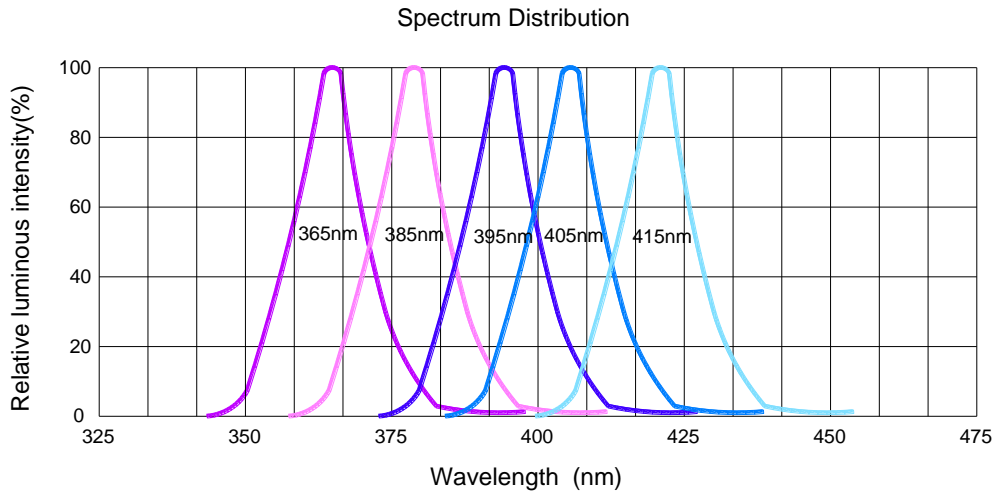
■ Binning Table for 385~405nm

Bin	P35W	P40W			
Po(W)	3.5-4.0	4.0-4.5			
Bin	V6	V8			
Vf(V)	6.0-8.0	8.0-10.0			
Bin	W385	W395	W405	W415	
Wp(nm)	380~390	390~400	400~410	410~420	

Notes :

1. Test condition: 2 A at time = 0.01 sec
2. Tolerance of Radiometric Power (Po) $\pm 5\%$
3. Tolerance of Wavelength $\pm 1.5\text{nm}$

■ Characteristic

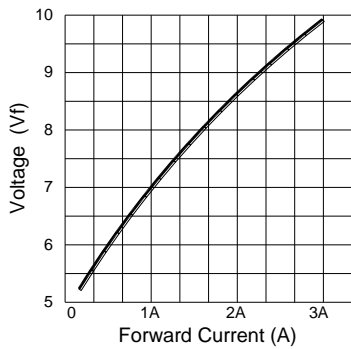


Notes:

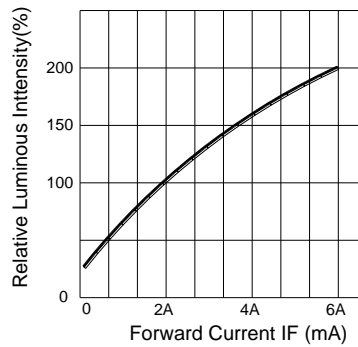
1. Test condition: 2A at time = 0.01 sec

■ Characteristic

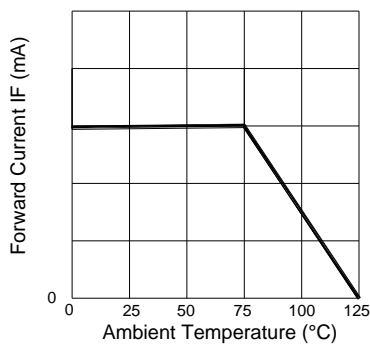
Forward Current VS. Forward Voltage



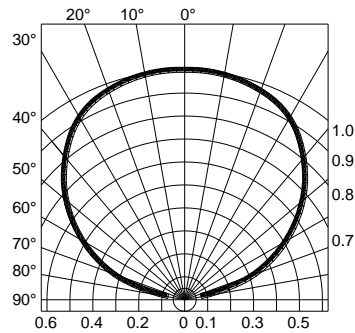
Luminous Intensity VS. Forward Current



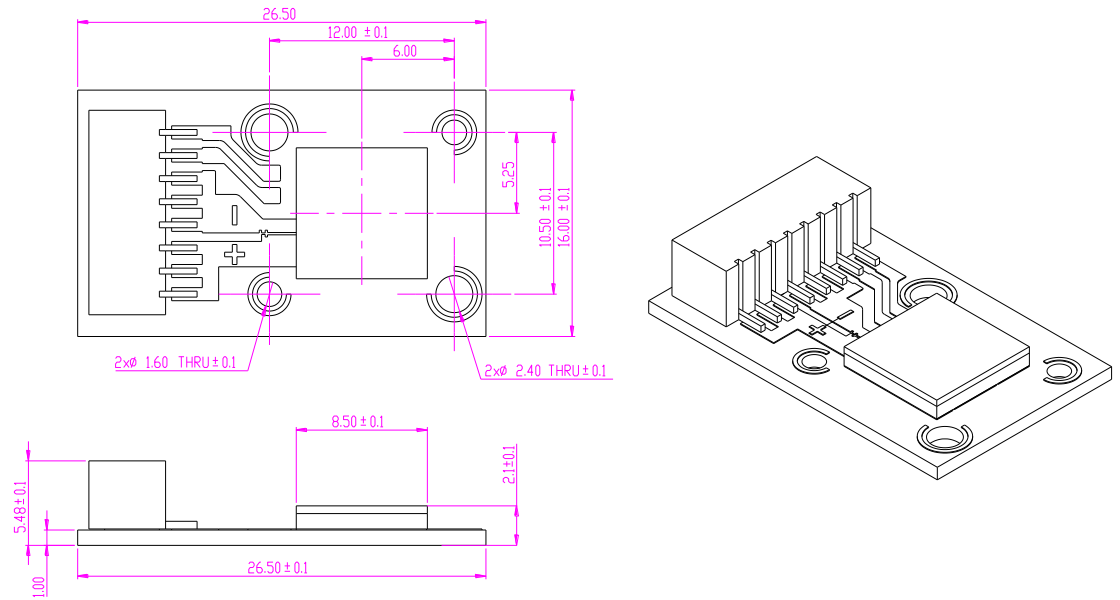
Forward Current VS. Ambient Temperature



Radiation Diagram



■ Dimensions & Circuit



Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.13\text{mm}$ unless other specified.