

Bottom Flat Backlight Illumination

- BF Series

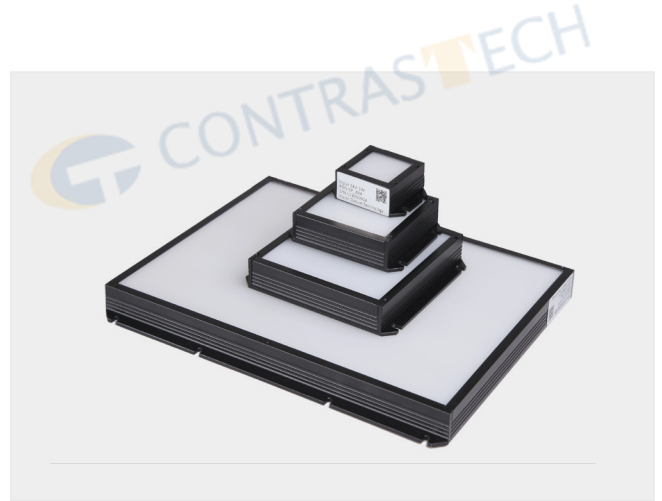
Flat lights provide area illumination with LED beads distributed on the bottom.

Features

- It provide diffused illumination from a flat emitting surface.
- It achieves high brightness with vast amount, high density SMD LED.

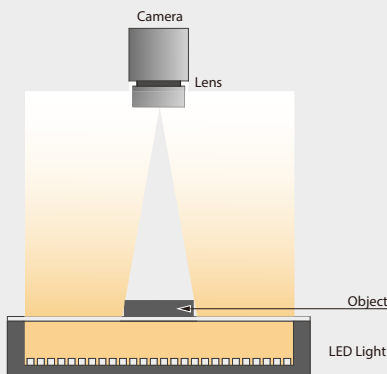
Applications

- Dimension measuring, visual inspection.
- Liquid level inspection, pinhole inspection, and burr inspection for metal parts, etc..



Illumination Structure

Light from the LEDs that are distributed on the bottom of the diffusion plate passes through the plate to produce uniform illumination.

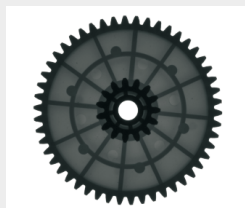


Examples of Bottom Flat Backlights Images

Lights: BF110110R

Imaging of wheel gear outline.

Illuminated by flat lights, the outline can be highlighted clearly. Easy to check location. The red flat back lights can provide the strong penetration.



Lights: BF5151R

Imaging of FPC circuit.

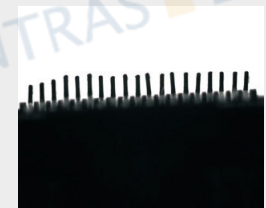
Since the light penetration ability is different between PCB's copper line and its substrate. By illuminating from back, the copper line's precise position can be distinguished from substrate.



Lights: BF7070R

Imaging of connector pins for space measurement

Inspect the flatness and space between pins, can show each pin's peak height and the space between pins under the irradiation of back lights.



Common Specifications

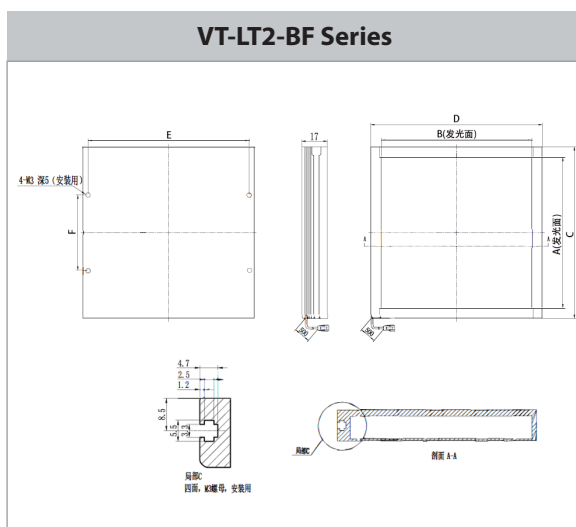
Input voltage	24VDC
Wavelength range	Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;
Color temperature (white)	5800-7500K
Operating environment (indoor)	Temperature: 0~40°C Humidity: 20% to 85% RH (with no condensation)
Life time	White:30,000hrs, Red: 60,000hrs (Depends on the operating environment, not a gurantee)
Case material	Aluminum alloy, Resin

Explanation of Model Code

VT-LT2-BF	110	110	(W/B/G/R)
Series	Emitting Length	Emitting Width	Color

Model No.	Optical spec.		Working Distance Recommended WD (mm)	Electrical specifications (GREEN / NIR / UV Accept custom)			Dimensions		
	Light Area			Supply Voltage (v)	Power cons. (w) ●	Power cons. (w) ● ○ ●	Length (mm)	Width (mm)	Height (mm)
Length (mm)	Width (mm)								
VT-LT2-BF2727	27	27	30-100	24	1.1	2.8	41	41	17
VT-LT2-BF4335	43	35	30-100	24	1.9	2.8	57	49	17
VT-LT2-BF5050	50	50	30-100	24	3.0	3.2	64	64	17
VT-LT2-BF6360	63	60	30-100	24	4.1	5.2	77	74	17
VT-LT2-BF8375	83	75	30-100	24	5.5	5.1	97	89	17
VT-LT2-BF100100	100	100	30-100	24	9.5	10.0	114	114	17
VT-LT2-BF140105	140	105	30-100	24	13.8	13.9	154	119	17
VT-LT2-BF160120	160	120	30-100	24	16.6	17.4	174	134	17
VT-LT2-BF20050	200	50	30-100	24	9.9	20.0	214	64	17
VT-LT2-BF200150	200	150	30-100	24	28.8	30.2	214	164	17
VT-LT2-BF211200	211	200	30-100	24	24.2	24.2	225	214	17
VT-LT2-BF224170	224	170	30-100	24	33.7	33.7	238	184	17

Dimension (mm)



Model No.	Dimensions					
	A	B	C	D	E	F
VT-LT2-BF2727	27	27	41	41	34	18
VT-LT2-BF4335	43	35	57	49	42	18
VT-LT2-BF5050	50	50	64	64	57	18
VT-LT2-BF6360	63	60	77	74	67	18
VT-LT2-BF8375	83	75	97	89	82	50
VT-LT2-BF100100	100	100	114	114	107	50
VT-LT2-BF140105	140	105	154	119	112	80
VT-LT2-BF160120	160	120	174	134	127	80
VT-LT2-BF20050	200	50	214	64	57	80
VT-LT2-BF200150	200	150	214	164	157	80
VT-LT2-BF211200	211	200	225	214	207	80
VT-LT2-BF224170	224	170	238	184	177	80