Q80 Rectangular Photoelectric Sensor — Contrast

BFCP-R80-3109-S124 series · Sensing Distance: 9mm · Operating Voltage: 10...30V DC

IP67
Ingress Protection



KEY SPECIFICATIONS

SENSING DISTANCE **9mm**	OPERATING VOLTAGE **10...30V DC**
SWITCHING FREQ. **15kHz**	AMBIENT TEMP. **-10 ...55 °C**
HOUSING **80*53*31mm**	RESPONSE TIME **33 µs**

FEATURES

- Contrast (colour/mark) detection
- Color sensor
- Strong plastic case
- High resolution

MODEL CODES

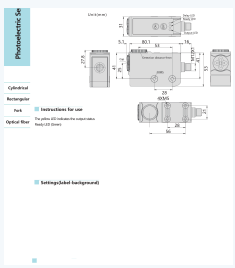
Output Type	Model Code
NPN/PNP N.O/N.C	**BFCP-R80-PN3109-S124** SKU 10104948

TECHNICAL DATA

Size	80*53*31mm
Sensing distance	9mm
Operating voltage	10...30V DC
Ripple	2V/pp Max
No-load current	Max50 mA@ 24Vcc
Output	1 PNP output/1 NPN
Output current	100 mA Max
Output saturation voltage	≤2V
Response time	33 µs
Switching frequency	15kHz
Delay	0 / 20 ms optional (Default configuration no delay)
Light-on / dark-on selection	Dark/Light selection automatic
LED indicator	Output LED (Yellow)/Ready LED (Green)/Delay LED (Orange)
Button	ON and OFF
Operating temperature	-10 ...55 °C
Storage temperature	-20 ...70 °C
Dielectric strength	500 VAC 1min, Between the electronics and the housing

Insulation resistance	>20 MΩ 500 Vdc, Between the electronic component and the housing
Rated sensing distance	9mm
Sensing distance tolerance	±3mm
Light spot size	1.5×5 mm @ 9 mm
Light source	Blue (465 nm)/Green (520 nm)/Red (630 nm) is selected automatically
Light immunity	According to EN 60947-5-2
Vibration resistance	0.5 mm amplitude, 10 ...55 Hz frequency, Every axis (EN60068-2-6)
Shock resistance	11 ms (30 G) Six shocks per axis (EN60068-2-27)
Housing material	ABS
Lens material	PMMA
Ingress protection	IP67
Connection	M12 4 Core

DIMENSIONAL DRAWINGS



All dimensions in mm.