



Spectra-Band Photocell Series

A family of special spectral-response silicon photo cells . . . for your unique product applications.

VIO-BLUE

Enhanced violet and blue response. Also can be used in U.V. detection because of high sensitivity to short wavelength radiation.

GREEN BLAZE

Photopic curve response for use in innumerable light response applications —with high reliability and low cost.

INFRA-R

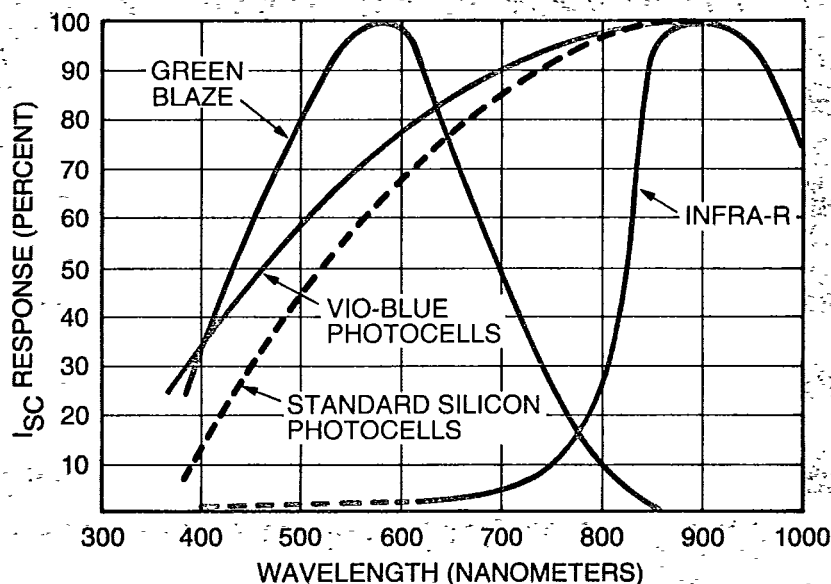
Visible cut-off, high infrared response. Solves ambient light problems in IR activated photoelectric applications.

FEATURES

- Select spectral response
- No bias power source needed
- High temperature stability and high sensitivity through silicon construction
- Low noise
- High reliability
- A wide variety of sizes and packages, special geometries available

APPLICATIONS

- Photographic equipment
- Color, pattern recognition equipment
- Light discriminating systems



TYPICAL SHORT CIRCUIT CURRENT (I_{sc}) RESPONSE

- STANDARD SILICON PHOTOVOLTAIC CELL (at 900 nm) ~ 0.48 A/W
- VIO-BLUE (at 900 nm) ~ 0.48 A/W
- GREEN BLAZE (at 555 nm) ~ 0.20 A/W
- INFRA-R (at 900 nm) ~ 0.45 A/W

TYPICAL SPECTRAL RESPONSE CHARACTERISTICS — NORMALIZED

INTERNATIONAL RECTIFIER










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Manufacturing facilities in United States, Canada, Great Britain, India, Italy and Japan. Sales offices and distributors in major cities throughout the world.

SPECTRA-BAND PHOTOCELLS

IR's special spectral response photocells are designed for photographic industry, photometric instrumentation, and photoelectric control/switching applications.

MECHANICAL SPECIFICATIONS

Spectra-Band Cell Configurations								
	Part Number	Part Number	Part Number	Part Number	Part Number	Part Number	Part Number	
GREEN-BLAZE	GB02505EPL	GB0505EPL	GB1010EPL	GB1020EPL	GBTO-18	GBTO-5	GBTO-8	
INFRA-R	FR02505EPL	FR0505EPL	FR1010EPL	FR1020EPL	FRT0-18	FRT0-5	FRT0-8	
VIO-BLUE	VB02505EPL	VB0505EPL	VB1010EPL	VB1020EPL	VBTO-18	VBTO-5	VBTO-8	
Package	Coated cell	Coated cell	Coated cell	Coated cell	Modified TO-18	TO-5	TO-8	
Lead Termination	6" Length Std.	6" Length Std.	6" Length Std.	6" Length Std.	Leads	Leads	Leads	
Cell Dimensions	In.	0.1 x 0.2	0.2 x 0.2	0.4 x 0.4	0.4 x 0.8	0.055 x 0.055	0.1 x 0.2	0.28 x 0.28
	Cm.	0.25 x 0.5	0.5 x 0.5	1.0 x 1.0	1.0 x 2.0	0.14 x 0.14	0.25 x 0.5	0.72 x 0.72
Active Area (Sq. Cm.)	0.1	0.2	0.9	1.8	0.018	0.1	0.5	

TYPICAL LIGHT RESPONSE CHARACTERISTICS

GREEN-BLAZE	GB0205EPL	GB0505EPL	GB1010EPL	GB1020EPL	GBTO-18	GBTO-5	GBTO-8
I _{SC} (ma) (See Note 2)	0.27	0.55	2.5	5.0	0.06	0.27	1.38
V _{OC} (Volts) (See Notes 1, 3)	0.47	0.47	0.47	0.47	0.47	0.47	0.47
INFRA-R	FR02505EPL	FR0505EPL	FR1010EPL	FR1020EPL	FRT0-18	FRT0-5	FRT0-8
I _{SC} (ma) (See Note 2)	1.28	2.55	11.5	23.0	0.25	1.28	6.38
V _{OC} (Volts) (See Notes 1, 3)	0.55	0.55	0.55	0.55	0.55	0.55	0.55
VIO-BLUE	VB02505EPL	VB0505EPL	VB1010EPL	VB1020EPL	VBTO-18	VBTO-5	VBTO-8
I _{SC} (ma) (See Note 2)	2.3	4.7	21.0	42.0	0.47	2.3	11.6
V _{OC} (Volts) (See Notes 1, 3)	0.55	0.55	0.55	0.55	0.55	0.55	0.55

NOTES: (1) Irradiance: 100mW/cm², AM1 solar radiation.
 (2) Short circuit current.
 (3) Open circuit voltage.