

Data Sheet

Universal LightProbe[™] S2 Unicolor Digital Sensor

Universal LightProbe S2 Unicolor Digital Sensors are designed for the simple ON / OFF test and color check of a single color LED, with a one-bit digital output, quickly determining PASS/FAIL status without further processing by the ATE.

Internal Int

Part Number: ULP-S2 SCC

CHARACTERISTICS

- Typical response time: <10mS capture time;
 <65mS overall response time
- Signal Output Loads: 20 mA max. Non-inductive.
- Furthur details on page 2

COLOR AND WHITE RESPONSE

- Tests a target LED's color by providing a Logic "1" voltage output (5 volts) only if the LED is the color specified and it is "ON"
- Tests five main LED colors: blue, green, yellow/amber, orange, or red, plus white
- Sensor is insensitive to the "wrong" color
- Provides optimum ATE/ICT Pin Board/memory interface for fast digital burst mode LED test

Specific Color Sensor	Output Voltage $(V$ оит $)$					
	В	G	Υ	0	R	W
Blue	5	0	0	0	0	0
Green	0	5	0	0	0	0
Yellow	0	0	5	0	0	0
Orange	0	0	0	5	0	0
Red	0	0	0	0	5	0
White	0	0	0	0	0	5

INTENSITY RESPONSE

- Unicolor Digital Sensors do not provide an intensity output
- When detecting the correct color, Unicolor Digital Sensors respond to a wide dynamic range of LED intensity
- No adjustments for intensity are necessary

Vouт	5	Right Color
0 Wrong Color		

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All Universal LightProbe S2 Sensors share the same form, and are pre-programmed to suit specific LED test requirements. The small size and non-conductive housing is specifically designed to accommodate today's high-density test fixtures.

UNICOLOR DIGITAL SENSOR CHARACTERISTICS:

Operating temperature range: 0°C to 70°C

Power consumption: Operates between +5 and 28 volts, at 6mA max.; less than 4.75 volts is not recommended

Voltage protection: Withstands up to +40 volts, & reverse polarity to -18 volts

Signal Output Loads: 20 mA max. Non-inductive.

Output Pins: 3 gold-plated standard wire-wrap pins (0.025 in. sq.)

Sensor Size: 0.560 in. dia x 1.38 in. long **Operating Temperature Range:** 0°C to 70°C

Typical response times: <10mS capture time; <65mS overall response time **Fiber-Optic Probes:** Can utilize any Universal LightProbe Fiber-Optic Probe

UNICOLOR DIGITAL SENSORS: Three standard wire-wrap pins

G - **Ground:** common for digital output and power input

S - Status of LED: Correct color = Logic '1' (5v); incorrect color = Logic 0 (0v)

P - DC Power Input: Between +5 and 28 volts



