Dual Element Axial Vactrols

VTL5C4/2

PACKAGE DIMENSIONS INCH (MM)

.50 (12.7) MINIMUM
.36 (9.1) / .39 (9.9)
1.00 (25.4) MINIMUM
.060 (1.52) MAX. (2 PLCS)
CATHODE IDENTIFIER
1
2
3
4
5
.04 (1.02) / .120 (3.05)
.010 (0.25) / .025 (0.64) SQ NOM.
.020 (0.51) DIA. NOM.

.300 (7.62) / .320 (8.13)
.200 (5.08) NOM.
.370 (9.40) / .390 (9.91)

1 −
2 +
3
4
5
LED   PHOTOCELL (LDR)

■ PLASTIC POTTING CONTOUR NOT CONTROLLED
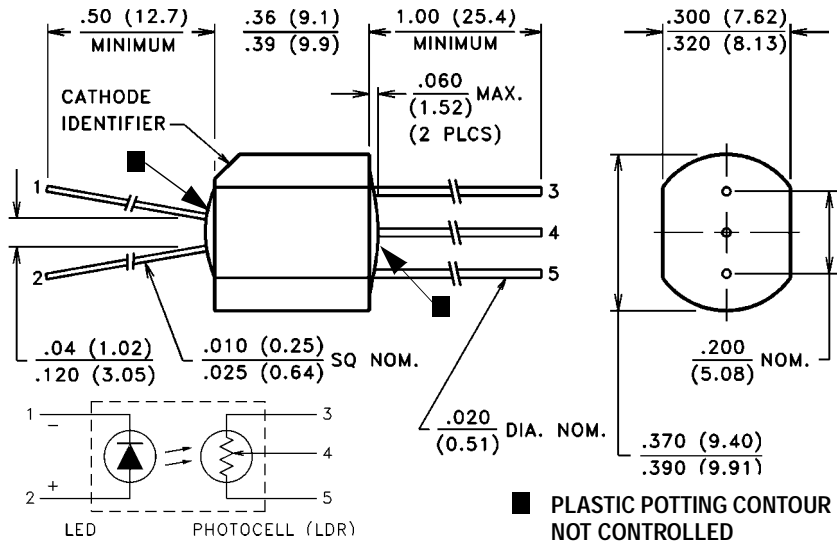
DESCRIPTION

VTL5C4/2 features a very low "on" resistance, fast response time, with a smaller temperature coefficient of resistance than VTL5C1.

ABSOLUTE MAXIMUM RATINGS @ 25°C

Maximum Temperatures
  Storage and Operating: −40°C to 75°C
Cell Power: 175 mW
  Derate above 30°C: 3.9 mW/°C
LED Current: 40 mA ❶
  Derate above 30°C: 0.9 mA/°C

LED Reverse Breakdown Voltage: 3.0 V

LED Forward Voltage Drop @ 20 mA: 2.0V (1.65V Typ.)

Min. Isolation Voltage @ 70% Rel. Humidity: 2500 VRMS

Output Cell Capacitance: 5.0 pF

Cell Voltage: 30V

Input - Output Coupling Capacitance: 0.5 pF

## ELECTRO-OPTICAL CHARCTERISTICS @ 25°C

| Part Number	Material Type	ON Resistance ❷		OFF ❸ Resistance @ 10 sec. (Min.)	Slope (Typ.) $\dfrac{@\ 0.5\ mA}{R\ @\ 5\ mA}$	Dynamic Range (Typ.) $\dfrac{R_{DARK}}{R\ @\ 20\ mA}$	Response Time ❹	
		Input current	Dark Adapted (Typ.)				Turn-on to 63% Final R_{ON} (Typ.)	Turn-off (Decay) to 100 kΩ (Max.)
VTL5C4/2	4	1 mA 10 mA	1.5 kΩ 150 Ω	400 Ω	8.3	68 db	6.0 ms	1.5 sec

Refer to Specification Notes, page 41.
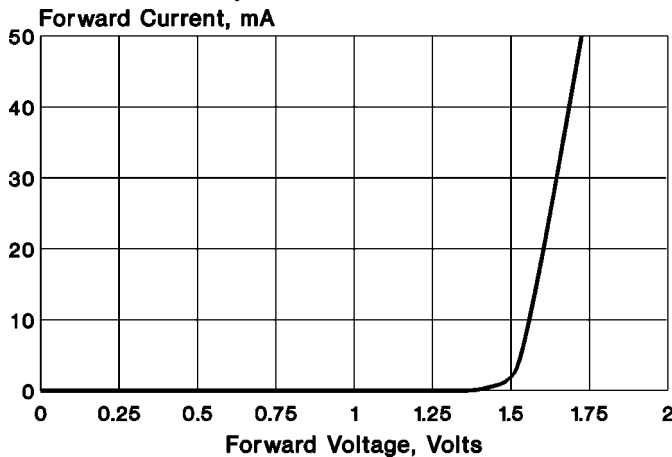
Typical Performance Curves (Per Element)

Output Resistance vs. Input Current
VTL5C4/2
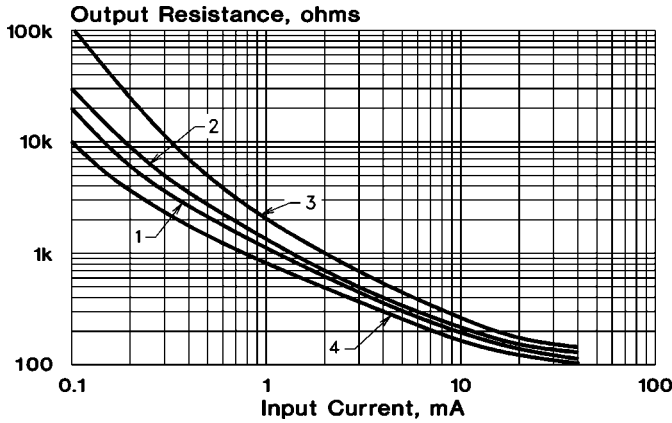
Response Time
VTL5C4/2
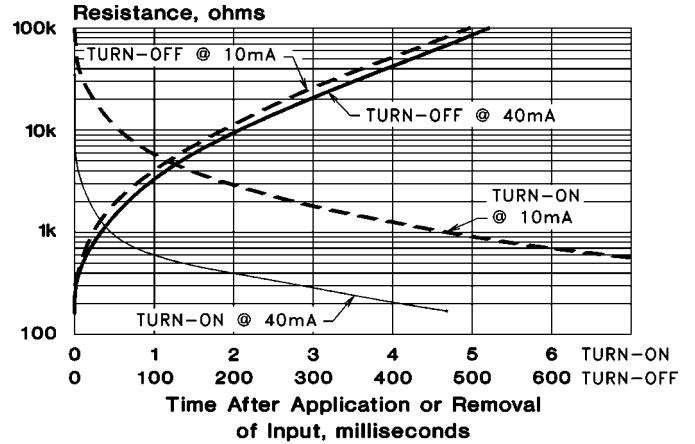
Input Characteristics

Notes:

1. At 1.0 mA and below, units may have substantially higher resistance than shown in the typical curves. Consult factory if closely controlled characteristics are required at low input currents.

2. Output resistance vs input current transfer curves are given for the following light adapt conditions:

   (1)   25°C — 24 hours @ no input
   (2)   25°C — 24 hours @ 40 mA input
   (3)   +50°C — 24 hours @ 40 mA input
   (4)   –20°C — 24 hours @ 40 mA input

3. Response time characteristics are based upon test following adapt condition (2) above.