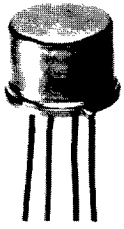
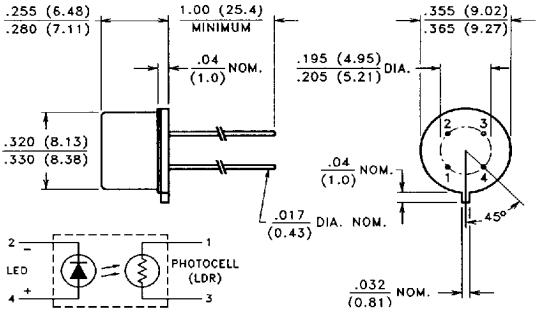


PACKAGE DIMENSIONS inch (mm)



TO-5 PACKAGE OUTLINE

DESCRIPTION

VTL2C3 features a small temperature coefficient of resistance, little light history memory, and a steeper slope than the VTL2C2.

VTL2C4 has the lowest "on" resistance of any device in the VTL2Cx series, fast speed and a smaller temperature coefficient of resistance than the VTL2C1.

ABSOLUTE MAXIMUM RATINGS @ 25°C

Maximum Temperatures
Storage and Operating: -40°C to 75°C

Cell Power: 100 mW
Derate above 30°C: 2.22 mW/ °C

LED Current: 40 mA [1]
Derate above 30°C: 0.9 mA / °C

LED Reverse Breakdown Voltage: 3.0 V

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

Min. Isolation Voltage @ 70% Relative Humidity: 500 V pk

Output Cell Capacitance: 5.0 pF

Cell Voltage: 300 V (VTL2C3), 70 V (VTL2C4)

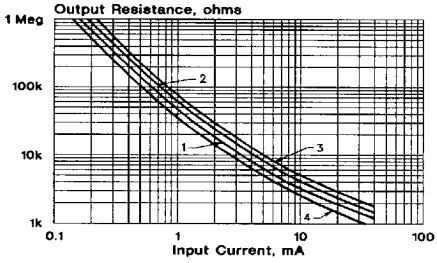
Input - Output Coupling Capacitance: 2.0 pF

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

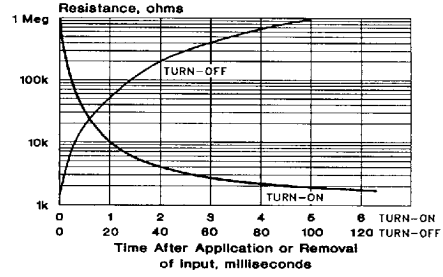
Part Number	Material Type	Output Resistance						Response Time [4]	
		ON Resistance [2]			OFF [3] Resistance @ 10 sec. (Min.)	Slope (Typ.) R @ .5 mA / R @ 5 mA	Dynamic Range (Typ.) R_{DARK} / R @ 20 mA	Turn-on to 63% Final R_{ON} (Typ.)	Turn-off (Decay) to 100 kΩ (Max.)
		Input Current	Dark Adapted (Typ.)	Light Adapted (Max.)					
VTL2C3	3	1 mA 40 mA	50 kΩ 1 kΩ	— 2 kΩ	10 MΩ	21	72 db	2.5 ms	35 ms
VTL2C4	4	1 mA 40 mA	1.5 kΩ 50 Ω	— 100 Ω	400 kΩ	14.7	72 db	6.0 ms	1.5 sec

Typical Performance Curves

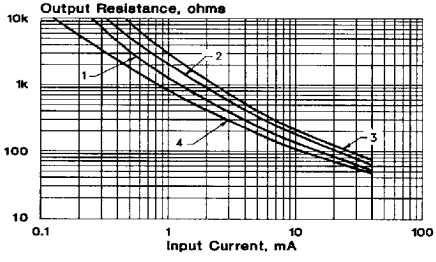
Output Resistance vs Input Current VTL2C3



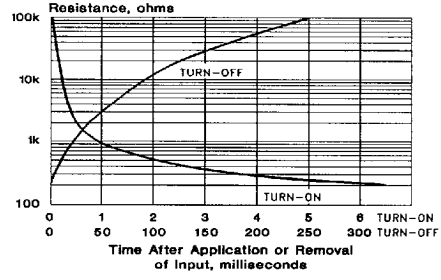
Response Time VTL2C3



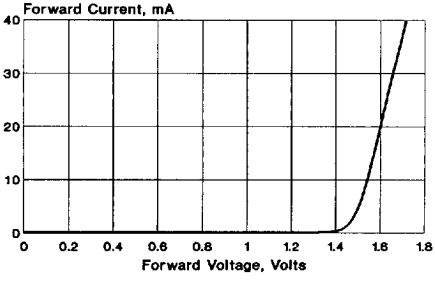
Output Resistance vs Input Current VTL2C4



Response Time VTL2C4



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 or 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.