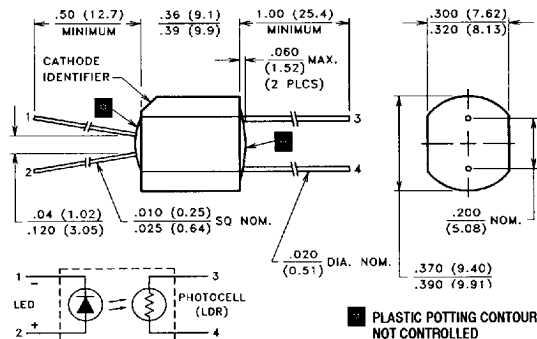


UL Listed File #73887

PACKAGE DIMENSIONS inch (mm)



DESCRIPTION

VTL5C8 is similar to VTL5C2 with a low temperature coefficient of resistance and little light history memory, but has a more shallow slope and a lower "on" resistance at low (1 mA) drive currents.

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
Derate above 30°C: 0.9 mA/°C

LED Reverse Breakdown Voltage: 3.0 V

LED Forward Voltage Drop @ 10 mA: 2.8 V (2.2 V typical)

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

Output Cell Capacitance: 5.0 pF

Cell Voltage: 500 V

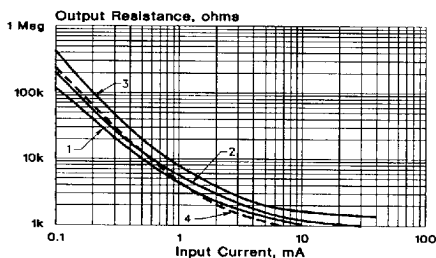
Input - Output Coupling Capacitance: 0.5 pF

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

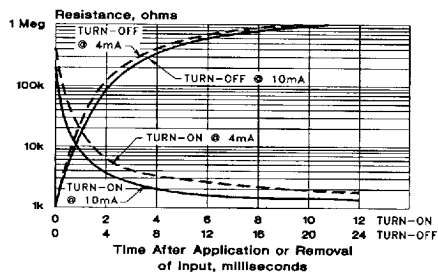
Part Number	Material Type	Output Resistance						Response Time ⁴	
		ON Resistance ²			OFF ³ Resistance @ 10 sec. (Min.)	Slope (Typ.) $\frac{R @ 5 \text{ mA}}{R @ 5 \text{ mA}}$	Dynamic Range (Typ.) $\frac{P_{DRK}}{R @ 20 \text{ mA}}$	Turn-on to 63% Final R _{ON} (Typ.)	Turn-off (Decay) to 100 kΩ (Max.)
		Input Current	Dark Adapted (Typ.)	Light Adapted (Max.)					
VTL5C8	0	1 mA 4 mA 16 mA	4.8 kΩ 1.8 kΩ 1.0 kΩ	— — 2.0 kΩ	10 MΩ	8	80 db	4 ms	60 ms

Typical Performance Curves

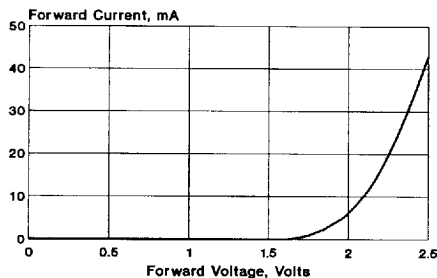
**Output Resistance vs Input Current
VTL5C8**



**Response Time
VTL5C8**



Input Characteristics



Notes:

- 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.
- Output resistance or input current transfer curves are given for the following light adapt conditions:
 - 25°C — 24 hours @ no input
 - 25°C — 24 hours @ 40 mA input
 - +50°C — 24 hours @ 40 mA input
 - 20°C — 24 hours @ 40 mA input
- Response time characteristics are based upon test following adapt condition (2) above.