Specifications

Power Supply
Power Supply Voltage: 4.5 - 24 Vdc
Power Supply Current: 50 mA maximum

Outputs
Output Voltage:
Essentially square wave fanout to 10 TTL inputs
TTL Compatible: (See Figure 1)
50% ±15% duty cycle
Logic 0: +.6 Vdc maximum
Logic 1: +4 to +4.6 Vdc @ 5mA

Supply Tracking: (See Figure 2)
50% ±15% duty cycle
Logic 0: +.6 Vdc maximum
Logic 1: \[ V_o = V_s x R_L \]
\[ R_L + 2.2k \]

Output Impedance:
2.2K Ohms ±5%
Output Current:
20 mA sink maximum
Output Current - Short Circuit:
5 mA maximum with 10V power supply
Reverse Battery Voltage:
-30 Vdc

Environmental
Operating Temperature:
-40°C to +125°C
Thermal Shock:
100 cycles air to air (-40° to +130°C)
1 min. ramp time with 30 min. soak
Salt Spray:
Humidity:
92% RH@ 40°C for 90 hrs.
No visible corrosion.
Dielectric Strength:
Per MIL-STD-202, method 301, 1000 Vrms (60Hz) for 5 sec. leads to case. 1.0 mA max. leakage.
Insulation Resistance:
Per MIL-STD-202, method 302, 500 Vdc for 30 sec. leads to case. 100 mega-ohm min.
Vibration:
Per MIL-STD-202, resonant frequency search, sine method 204, test cond. C&D (20g);
random method 214a, test cond. A&B (7.56g) for 15 min.
Shock:
Per MIL-STD-202, method 213b (sawtooth),
test cond. H&I (1 00g, 6 ms), 3 shocks,
mutually perpendicular planes

Materials
Housing:
300 series stainless steel
Leads:
AWG #24 Teflon, 200°C
Cable:
AWG #20 Irradiated cross-linked polyolefin, 125°C
Rotational alignment of sensing face is not required for optimum output signal.

TTL Compatible Fig. 1

Supply Tracking Fig. 2

Note: Either output will work with any AI-Tek Tachometer.