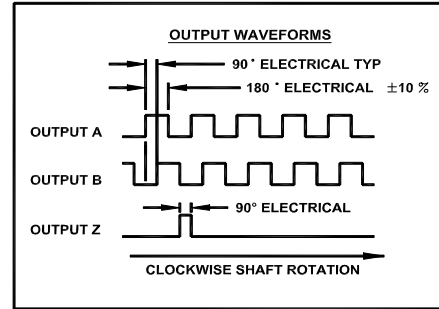


R2 Encoder Data Sheet

Electrical Specifications

Input Voltage	5 VDC +/- 10%
Input Current Requirements	60 mA Typical @ 5 VDC Plus Interface Loads
Input Ripple	2% Peak to Peak @ 5 VDC
Output Circuit	Open Collector Output sinks up to 4 mA
Frequency Response	300 kHz max.
Incremental Output Format	Quadrature with A leading B for CW rotation.* Index Pulse gated with A and B.
Symmetry	180 Degrees +/- 10% Typical
Minimum Edge separation	45 electrical degrees



Environmental Specifications

Storage Temperature	-40 to +115° C
Operating Temperature	-30 to +100° C Typical
Humidity	90% Non-Condensing
Vibration	5 - 2000 Hz @ 10 G's
Shock	50 G's @ 11 ms duration
IP Rating	IP 40

Mechanical Specifications

Line Count	1000 lines/revolution
Maximum Shaft Speed	18,000 RPM
Through Shaft Diameter	0.250" (-0.0000", +0.0007")
Radial Shaft Movement	0.002" TIR
Axial Shaft Movement	+/-0.010 inches MAX
Base Material	Polyphenylene Sulfide (Ryton R4)
Cover Material	Black polycarbonate
Termination	5 position shrouded pin header
Mounting	1.280" Bolt Circle
Moment of Inertial	1.17 x 10 ⁻⁵ oz-in-s ²

ENCODER CONNECTIONS	
PIN	FUNCTION
1	GND
2	CH. Z
3	CH. A
4	+5V
5	CH. B

*CW rotation of motor front shaft with encoder mounted on rear shaft

