

RX/TX REPEATER



SPECIFICATIONS

Supply Source (Vcc)	5 to 24 VDC
Current Consumption.....	20 mA max (plus encoder and output load requirements)
Max Frequency	Up to 1 MHz
Enclosure.....	IP54 (dust proof)
Earth Circuit	Grounded to Case
Input Voltage.....	24 VDC Max Diff
Output Voltage	5 VDC or Vcc
Output Current	30 mA/Channel Max

RX/TX REPEATER ORDERING INFORMATION

(Specify stock # when ordering)

Differential = A,A',B,B',Z,Z'

For differential signals only

Stock #	INPUT	OUTPUT
	Differential Line Receiver - MAX 3095	Differential Line Driver 7272
100020-13	5V	5V
100020-14	5V	Vcc ¹
100020-15	6-12V	5V
100020-16	6-12V	Vcc ¹
100020-17	13-24V	5V-
100020-18	13-24V	Vcc ¹

¹The outputs will be equivalent to voltage applied to Vcc (Pin P1-15). The input range for this pin is 5-24 VDC.

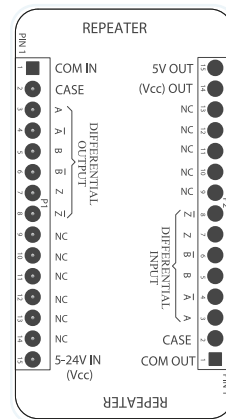
FEATURES

The RX/TX Repeater retransmits signals from an encoder output in order to drive signals over a longer distance with reduced noise and distortion free waveforms. The input is equipped with a Differential Line Receiver and a Differential Line Driver. It takes the differential signals (A, A', B, B', Z, Z'), squares the signals up, and then repeats the signals at the outputs.

Benefits are greater immunity from electrical noise, signal distortion, and interference, especially with long cable runs. The output signal can be 5 VDC or an amplitude equivalent to Vcc.

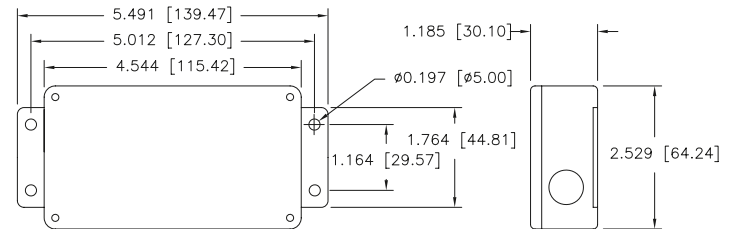
APPLICATIONS

Repeat differential signals for data transmission over long distances. To properly terminate differential signals to eliminate/reduce signal distortions. Increase output current drive capability in order to drive multiple receivers



NOTES UNLESS OTHERWISE SPECIFIED

1. TERMINATE CABLE SHIELD/DRAIN WIRES TO THE CASE TERMINAL OF P1 AND P2, IF APPLICABLE. BARE CONDUCTORS MUST BE ELECTRICALLY INSULATED FROM THE CIRCUIT BOARD WITH A NONCONDUCTIVE SLEEVE SUCH AS HEAT SHRINK TUBING.
2. RECOMMENDED CABLE FOR DIFFERENTIAL/COMPLEMENTARY ENCODER SIGNALS: "LOW CAPACITANCE, TWISTED-SHIELDED PAIR: SEE ACCESSORIES SECTION FOR 4XXC CABLES/CONNECTORS. 4XXC CABLES MUST HAVE OUTER INSULATION STRIPPED OFF IN ORDER TO FIT THROUGH CABLE ENTRY GLANDS.
3. SEE CONFIGURATION ORDERING GUIDE FOR INPUT/OUTPUT VOLTAGE PER THE SELECTED RXTX MODEL NUMBER
4. P2-14 (Vcc) or P2-15 (5V) CAN BE USED TO POWER ENCODER.
5. P1-15 (5-24VDC IN (Vcc)) IS FOR CUSTOMER SUPPLIED POWER TO OPERATE RXTX.



All dimensions are in inches with a tolerance of +0.005" or +0.01" unless otherwise specified. Metric dimensions are given in brackets [mm].