Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

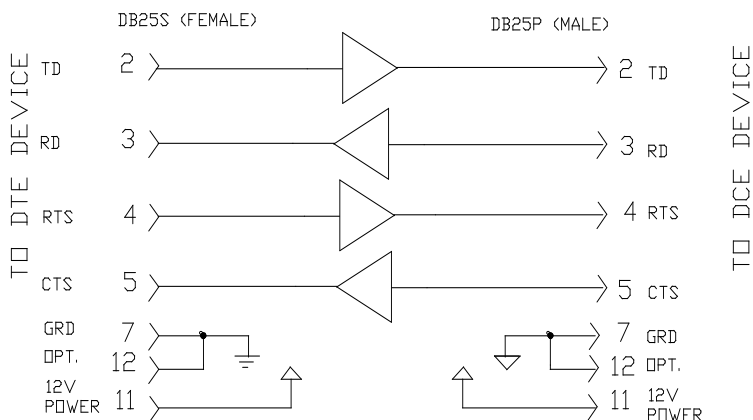# Contact us

B&B ELECTRONICS

PRODUCT INFORMATION

RS-232 to RS-232 Port-Powered Optical Isolator
MODEL 232SPOP4

The Model 232SPOP4 optically isolates four RS-232 lines. The isolator has a DB25S female connector on the DTE side and a DB25P male connector on the DCE side of the isolator. Signals pass through the isolator as follows:

When connecting the Model 232SPOP4 it is recommended that all signals that are outputs be connected. The Model 232SPOPO4 derives power from these signals, even if they are not used by your system.

On a DTE device, with a DB25 pin connector, the following lines are outputs:
  TD(2), RTS(4), DTE READY(DTR) (20)

On a DCE device, with a DB25 pin connector, the following lines are outputs:
  RD(3), CTS(5), DCE READY(DSR) (6), RLSD(CD) (8)

On a DB9 pin IBM compatible computer with a standard serial port the outputs are:
  TD(3), RTS(7), DTE READY(DTR) (4)

If you don't know if your ports are DTE or DCE disconnect the cables and connect a breakout box. Connect the breakout box to only one port at a time. When the output lines are in the idle condition, they will indicate a negative state. If the output lines are in a constant active condition, they will indicate the positive state. If the lines are inputs, the LEDs on the breakout box will not light.

If your port meets the low voltage requirements of RS-562, you will need to externally power the isolator. An RS-562 port will only produce about 3.7 volts, which in not adequate to power the isolator. Probably the only devices that will have this type of port are notebook computers or very low power laptop computers. To externally power the isolator connect each side of the isolator to a separately isolated +12 V power supply (30 ma). Connect +12 VDC to pin 11 and Ground to pin 12 on one side of the isolator to one power supply. Connect +12 VDC to pin 11 and Ground to pin 12 on the other side of the isolator to the second power supply.

NOTE: When using an external supply, the supply should be connected only to specifically labeled power inputs (power jack, terminal block, etc.). Connecting an external power supply to the handshake lines may damage the unit. Contact technical support for more information on connecting an external power supply to the handshake lines.

Specifications:
Dimensions: 3.06"L x 2.14"W x .80"H
Temperature Rating: 0°C to 70°C
Data Rate: Up to 38.4K baud
                        FCC Approved Class A

B&B ELECTRONICS

B&B ELECTRONICS

PRODUCT INFORMATION

MODEL 232SPOP4

J2
MALE
25 PIN

J2:3 RD
J2:2 TD
J2:5 CTS
J2:4 RTS
J2:6 DCE READY
J2:8 RSLD
J2:20 DTE READY
J2:7 SIGNAL
J2:12 GROUND
J2:11 REMOTE POWER INPUT

JP2
TO ALL +5V V2

U5 TSC232
VOLTAGE INVERTER
+V VOLTAGE DOUBLER
C1 1
C6 1
C3 1
C7 1
+5V V2
C18 .01UF
+5V

D2 D1
D9 D10
D8
D7
D17
D20
CR1 5V
R16 120 1N4005 D18
R15 120
C12 10
C9 10

U7 LM555CM
VCC RESET TRIG THR CONT DIS OUT GND
R13 4.7K
C10 .02
C14 10

R5 1K
R8 22K
R9 22K
R11 1K
R2 22K
R3 22K
R6 22K
R4 22K
R7 1K
R10 22K
R12 22K
R1 1K

U1 HCPL0701
U2 HCPL0701
U4 HCPL0701
U6 HCPL0701

+5V V2
+5V V1

D6
D5
D4
D3
D16 D15 D14
D13 D12 D11

U3 TSC232
VOLTAGE INVERTER
+V VOLTAGE DOUBLER
C4 1
C8 1
C2 1
C5 1
+5V V1
C17 .01UF
+5V

U8 LM555CM
VCC RESET TRIG THR CONT DIS OUT GND
R14 4.7K
C13 .02
C16 10
C11 10
C15 10
D22
D19
CR2 5V
R17 120
R18 120
TO ALL +5V V1
D21 1N4005

J1
FEMALE
25 PIN

J1:2 TD
J1:3 RD
J1:4 RTS
J1:5 CTS
J1:20 DTE READY
J1:6 DCE READY
J1:8 RSLD
J1:7 SIGNAL
J1:12 GROUND
J1:11 REMOTE POWER INPUT

JP1
TO ALL +5V

B&B ELECTRONICS