

DATA SHEET

Reed Relay - Stackable 6 Line Switcher

3035 Series

DESCRIPTION

The 3035 Series is a six channel relay board series using reed relays. This implementation is targeted at signal switching. The boards will come with a choice of supply voltages.



Document ID: 3035OPM001

Date: 12/07/2021

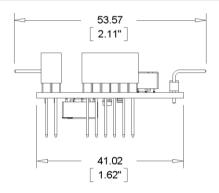
Version: 0-1



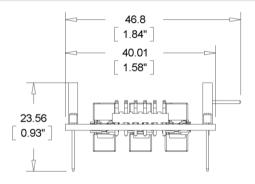
Dimensions and Board Layout

UNITS: mm [inch]

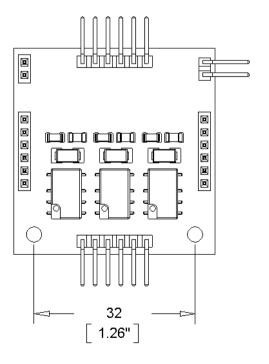
Side View



Front View



Top View



0-1

Version:

Date: 12/07/2021



General Specifications

Mechanical							
Board Length		52mm					
Board Width		40mm					
Board Height		28mm					
Mounting Holes		2 @ 3.1mm Dia.					
PCB Thickness		1.6mm					
PCB Material		FR-4					
	Elect	trical					
PCB Header Conducto	or	Tin Coated Brass					
Relay Contact Arrange	ement	2 form C, 2 CO					
Relay Type		Reed Contacts					
	Maximum Rated Power	62.5VA					
	Maximum Switching Voltage	220VDC, 250VAC					
	Maximum Constant Current	2A					
Board and Relay Switching Ratings	Minimum Wetting Current	10μΑ					
	Operate/ Release Time Max	3ms (Without Diode), 5ms (With Diode)					
	Bounce Time Max	5ms					
	Contact Material	Palladium Ruthenium					
	Mechanical Endurance	>10x10^8 Operations					
Ambient Temperature		-40°C to +85°C					
Shock Resistance (des	structive)	4900 m/s2 (500G)					
Vibration Resistance (functional)	10 to 500 Hz (20G)					
	RF [Data					
Isolation at 100MHz/900MHz		37.0dB/18.8dB					
Insertion Loss at 100M	1Hz/900MHz	0.03dB/0.33dB					
Voltage Standing Wave Ratio (VSWR) at 100MHz/900MHz		1.06/1.49					

Document ID: 3035OPM001 Version:

Date: 12/07/2021 Page 3 of 7

0-1



Series Specifications

Order Code		3035IDD001					
Description Code (Refer Key in Page 6)		24-LR-DPNO-06-D					
Board Voltage Input		24V					
Max. Board Power Re	quired @ 24V All	3.31 W					
Channels ON							
Leakage Current (All Channels Off)		Leakage Current of Driving Device *6 Channels					
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (24V)		23mA (Sinking)					
Relay Coil	Rated Voltage	24V					
	Operate Voltage	18V					
	Release Voltage	2.4V					
	Resistance	2880 ohms					
	Rated Power	200mW					

Order Code		3035IDD002					
Description Code (Refer Key in Page 6)		12-LR-DPNO-06-D					
Board Voltage Input		12V					
Max. Board Power Required @ 12V All Channels ON		1.9 W					
Leakage Current (All Channels Off)		Leakage Current of Driving Device *6 Channels					
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (12V)		26.4mA (Sinking)					
Relay Coil	Rated Voltage	12V					
	Operate Voltage	9V					
	Release Voltage	1.2V					
	Resistance	1029 ohms					
	Rated Power	140mW					

Order Code		3035IDD003					
Description Code (Refer Key in Page 6)		5-LR-DPNO-06-D					
Board Voltage Input		5V					
Max. Board Power Required @ 5V All Channels ON		1.31 W					
Leakage Current (All Channels Off)		Leakage Current of Driving Device *6 Channels					
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (5V)		43.8mA (Sinking)					
Relay Coil	Rated Voltage	5V					
	Operate Voltage	3.75 V					
	Release Voltage	0.5V					
	Resistance	178 ohms					
	Rated Power	140mW					

Date: 12/07/2021 Page 4 of 7

0-1

Version:



Relay Boards Description Code Key

	CODE	Relay Control Voltage	-	Relay Type	-	Relay Configuration	-	Number of Relays per board	-	Relay Control Signal Type	_	Additional Options
5 V 12 V 24 V	05 12 24											
Mechanical Solid State Low Voltage Reed High Voltage Reed	ME* SS* LR HR*											
Single Pole Single Throw - Normally Closed Single Pole Single Throw - Normally Open Single Pole Double Throw Double Pole Single Throw - Normally Closed Double Pole Single Throw - Normally Open Double Pole Double Throw	SPNC* SPNO* SPDT* DPNC* DPNO DPDT*											
6 Relays 8 Relays	06 08*											
TTL / DIO Controlled Relay Driver Controlled	T* D											
None Conformal Coated Custom Modifications / Features (On Order)	CC CM											

^{*} Option not available in this product

Document ID: Date: 3035OPM001 12/07/2021



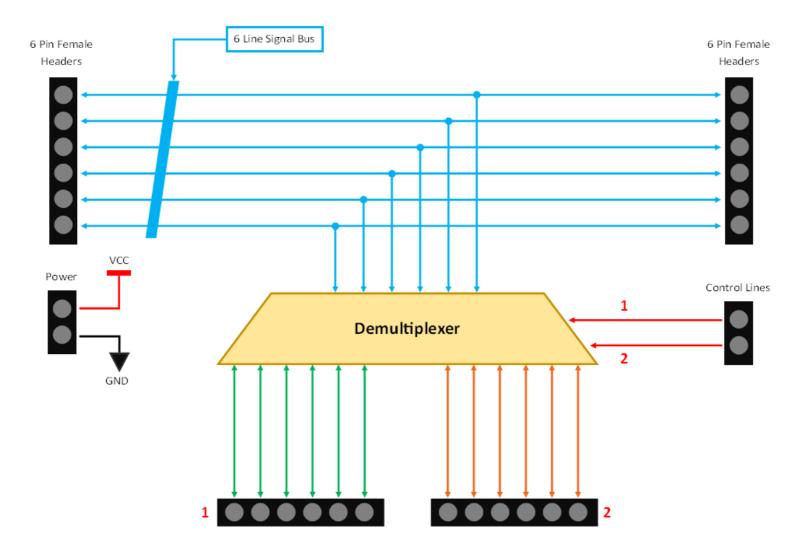


Figure 1 - Block Diagram of Board Functionality

0-1



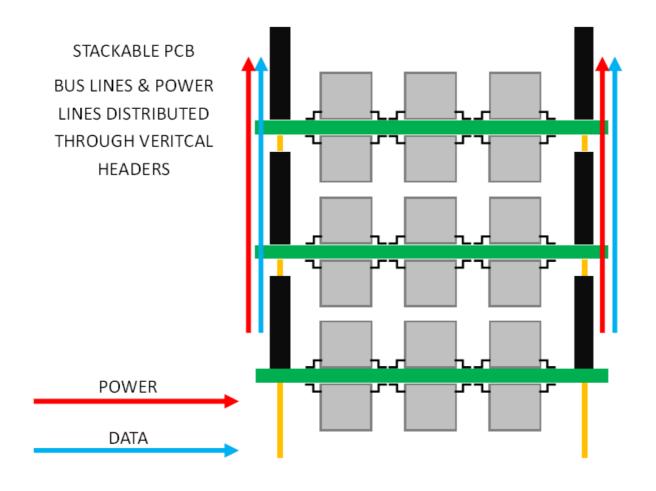


Figure 2 - Block Diagram of Board Usage for Stacked Bus Lines

0-1

Document ID: 3035OPM001 Version:
Date: 12/07/2021