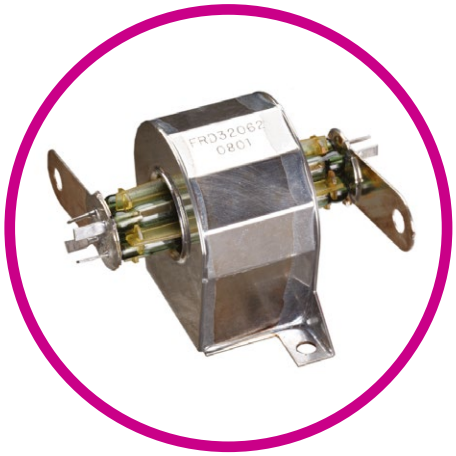
| FRD30000

FULLY SCREENED, 6.5KV, 20A REED RELAY



The very high carry current capacity and high voltage isolation of this series is achieved through the use of multiple high vacuum reed switch contacts, ensuring a high level of performance and reliability. The two standard models will carry currents of 12 and 20Amps respectively at 30MHz and feature silver plated, fully screened coil assemblies for ultra-low RF losses. Typical applications include over the horizon (OTH) HF radar systems and 1kW base station transmitters.

Available as Form A (SPNO) only.

Features

- Up to 20A Carry Current at 30MHz
- 6.5kV DC isolation across contacts
- Fully Screened Coil for Low RF Loss
- Cost Effective alternative to Vacuum Ceramic Devices
- Unique Design
- Suitable for 1 kW HF Transmitters

SPECIFICATIONS

Contact	Units	Condition	FRD32061	FRD32062
Action (Form A, B or Latching)			A	A
Switching Voltage	V	DC max	20	20
Switching Current	A	DC max	1	1
Carry Current	A	RMS at 30MHz max	12	20
Isolation	kV	DC max	6	6.5
Capacitance (max.)	pF	coil/screen gnd	2	2
Lifetime	operations	dry switching	10^9	10^9
		24V, 1A	10^7-10^8	10^7-10^8
Contact Resistance	mOhms	maximum (typical)	50 (10)	50 (10)
Insulation Resistance	Ohms	minimum (typical)	10^{10} (10^{13})	10^{10} (10^{13})
Coil at 20°C				
Nominal Working Voltage	VDC		24	24
Must Operate	VDC	max	16	16
Must Release	VDC	min	4	4
Nominal Resistance	Ohms	+/-10%	430	270
RF Screening			Full	Full
RF Screening Connection			Via Mtg Screws	Via Mtg Screws

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Relay	Units	Condition	FRD32061	FRD32062
Operate Time (Incl. Bounce)	ms		5	5
Release Time	ms		3	3
Isolation Contact to all other Terminals	kV	DC max	10	10
Isolation Coil to Screen	kV	DC max	0.5	0.5
Capacitance Contact to all other Terminals	pF	contacts open	6.0	6.0
Environmental Conditions				
Storage Temperature Range	°C		-55°C to +125°C	
Operating Temperature Range	°C		-40°C to +85°C	
Weight	gm	typical	76	108

Please refer to this document for circuit design notes:
https://www.cynergy3.com/blog/reed-relay-application-notes

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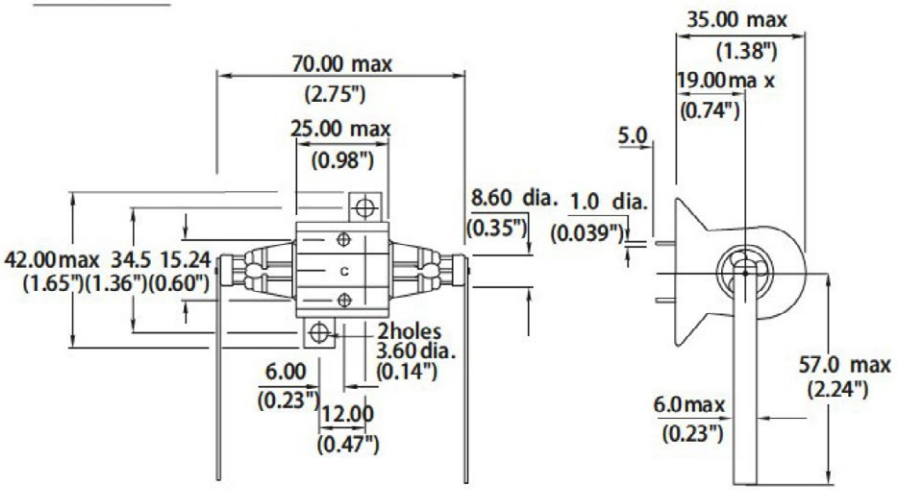
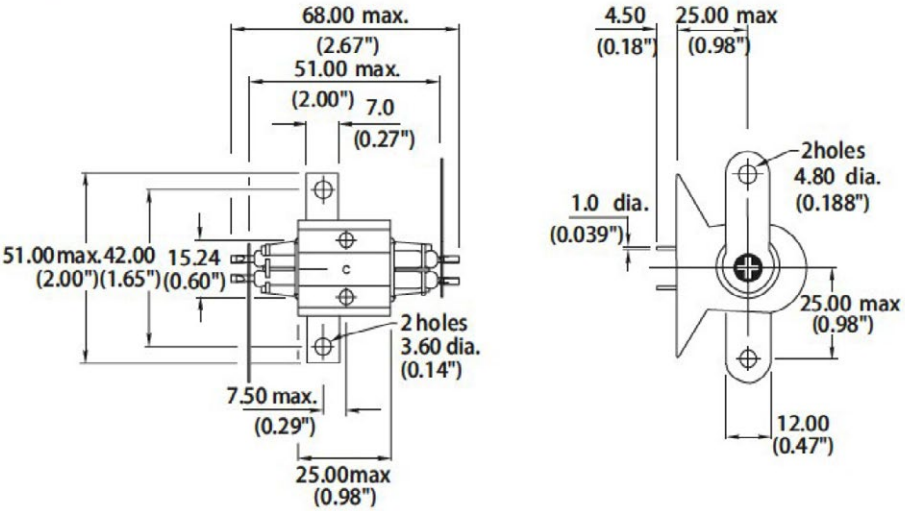
DIMENSIONS

All dimensions are in millimeters.

FRD32061



FRD32062



Please refer to this document for circuit design notes:
https://www.cynergy3.com/blog/reed-relay-application-notes

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