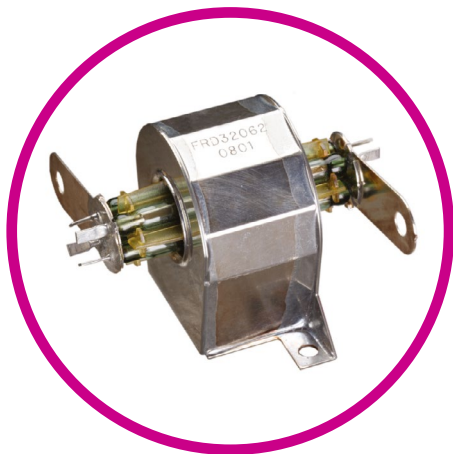


## | FRD30000

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

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

Please refer to this document for circuit design notes:

<https://www.cynergy3.com/blog/reed-relay-application-notes>



## DIMENSIONS

All dimensions are in millimeters.

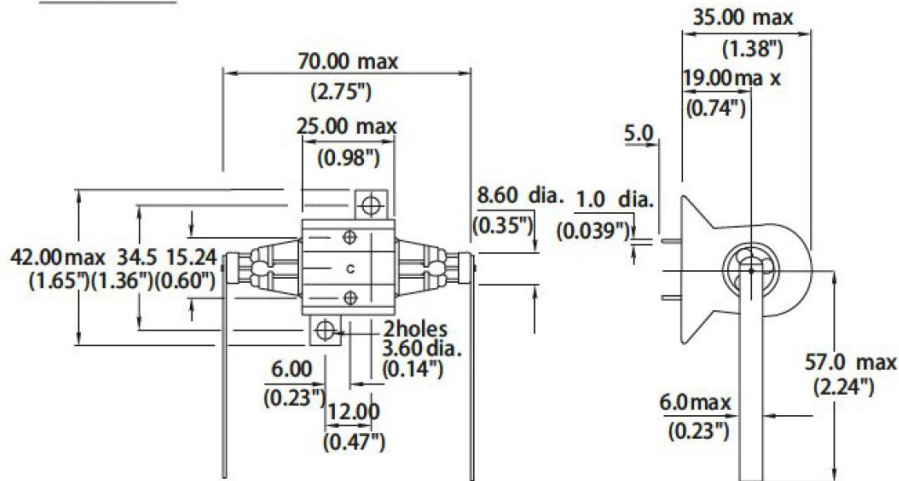
Distributor

where technologies meet solutions

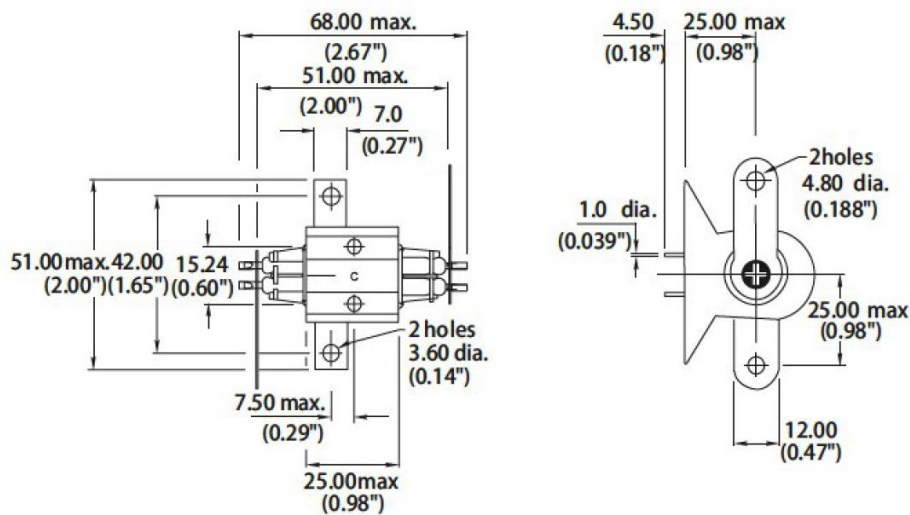
info@amstechnologies.com  
www.amstechnologies-webshop.com

**Contact us**

### FRD32061



### FRD32062



Please refer to this document for circuit design notes:

<https://www.cynergy3.com/blog/reed-relay-application-notes>

Made in the UK

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at [www.sensata.com](http://www.sensata.com) SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.