

- **New Fully Screened Coil for Low RF Loss**
- **Up to 9kVDC and 6A at 30MHz**
- **Drop-in replacement for FRD12000 Series**
- **Ideal for Antenna Tuning Units**
- **Customising Facility**

## FRD13000 Series Fully Screened. 9kV, 6A

A development of the FRD12000 series, this design has a complete RF screen around the coil assembly, offering a very low loss transmission path. This results in better carry current performance at elevated temperatures. This device also features an anti-corona sleeve shrouding the reed switch contact for improved peak RF voltage isolation.

CONTACT	UNITS	CONDITIONS	FRD13503	FRD13504
Action (form A, B or Latching)			A	B
Switching Voltage	V	DC max	20	20
Switching Current	A	DC max	1	1
Carry Current	A	RMS max	6	6
Isolation	kV	DC max	9	9
Isolation	kV	RF peak (f=2MHz)	8	8
Capacitance	pF	coil/screen gnd	0.5	0.5
Lifetime	operations	dry switching	10 <sup>9</sup>	10 <sup>9</sup>
Contact Resistance	mOhms	maximum (typical)	50 (15)	50 (15)
Insulation Resistance	Ohms	minimum (typical)	10 <sup>10</sup> (10 <sup>13</sup> )	10 <sup>10</sup> (10 <sup>13</sup> )
ESR at 4.5A, 30MHz	mOhms	typical	30	30

  

COIL at 20°C				
Nominal Working Voltage	VDC		24	24
Must Operate	VDC	max	15	16
Must Release	VDC	min	3	3
Nominal Resistance	Ohms	+/-10%	900	900
RF Screening			Full	Full
RF Screening Connection		pin position	1 & 8	1 & 8
Coil Connections		pin position	4 & 5	4 & 5(+)

  

RELAY				
Operate time (incl. bounce)	mS		2	1
Release time	mS		1	2
Isolation contact to all other terminals	kV	DC max	9	9
Isolation coil to screen	kV	DC max	0.5	0.5
Capacitance contact to all other terminals	pF	contacts open	1.5	1.5

  

ENVIRONMENTAL				
Storage temperature range	°C		-55 to +125	
Operating temperature range	°C	Limited current*	-40 to +85	
Shock	g	11ms 1/2 sine pk	100	
Bump	g	6ms 1/2 sine pk	40	
Vibration	g	10- 500Hz	10	

  

\*see graphical data

### CONTACT US NOW

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