

- **Bistable Latching Relay**
- **0.5 ms Coil Pulse length**
- **3.5kV DC Isolation**
- **1.5A Carry Current**
- **RF & Magnetic Screening**
- **Approved to MIL standards for Bump, Shock and Vibration**

FRS22012

Fast Latching, Screened. 3.5kV, 1.5A

The FRS22012 latching RF reed relay designed for manpack portable HF radio systems where power resources are limited. The relay is capable of withstanding 3.5kV between contacts and carrying 1.5A current at 30MHz. The device features RF and magnetic screening, allowing close mounting, and a unique coil design enabling switching with coil pulse lengths down to 0.5ms, further reducing power supply demands. The FRS22012 is an ideal choice for applications where board space is at a premium but where RF performance is demanded.

CONTACT	UNITS	CONDITIONS	FRS22012
Action (form A, B or Latching)			Latching
Switching Voltage	V	DC max	20
Switching Current	A	DC max	0.5
Carry Current	A	RMS at 30MHz	1.5
Isolation	kV	DC max	3.5
Capacitance	pF	coil/screen gnd	0.2
Contact Connections		pin number	3 & 4
Lifetime	operations	dry switching	10 ⁹
Contact Resistance	mOhms	maximum (typical)	80 (30)
Insulation Resistance	Ohms	minimum (typical)	10 ¹⁰ (10 ¹³)
ESR at 1.5A, 30MHz	mOhms	typical	400
COIL at 20°C			
Nom. Working Voltage	VDC		12
Min. pulse length	ms	Minimum	0.5
Operate time	ms	diode fitted	0.5
Release time	ms	diode fitted	0.5
Nominal Resistance	ohms	+/-10%	500
RF Screening			Part
RF Screening Connection		pin number	7
Coil Connections	Set	pin number	1 & 2(+)
	Reset		5 & 6(+)
RELAY			
Isolation contact to coil/screen	kV	DC max	4
Capacitance contact to all other terminals	pF	contacts open	2.5
Capacitance contact to all other terminals	pF	contacts closed	4.0
ENVIRONMENTAL			
Operating temperature range	°C		-40 to +85
Storage temperature range	°C		-40 to +125

CONTACT US NOW

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