

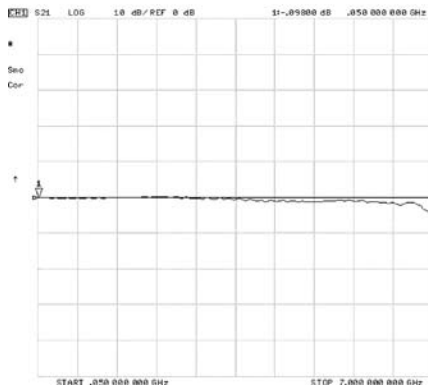
7 GHz High Frequency Reed Relay for 50 Ω Impedance

RELAY DATA

All Data at 20° C	Switch Model → Contact Form →	Contact 80 Form A			
Contact Ratings	Conditions	Min.	Typ.	Max.	Units
Contact Ratings	Any DC combination of V & A not to exceed their individual max.'s.			10	W
Switching Voltage	DC or peak AC			170	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			0.5	A
Bulk Resistance	Through all plated material on substrate		200	350	m Ω
Static Contact Resistance	w/ 0.5 V & 50 mA		75	100	m Ω
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA		100	150	m Ω
Insulation Resistance (100 Volts applied)	Across Contact Contact to coil and shield	10 ¹⁰ 10 ¹³	10 ¹² 10 ¹⁴		Ω
Breakdown Voltage	Across Contact Coil to contact	210 1500			VDC
Operate Time incl. Bounce	Measured w/ nominal voltage			0.1	ms
Release Time	No coil suppression			0.02	ms
Capacitance (@ 10 kHz)	Across Contact Contact to coil and shield		0.1 0.7		pF
Life Expectancies					
Switching 5 V - 10mA	DC <10 pF stray cap.		1000		10 ⁶ Cycles
For other load requirements, see the life test section on P. 120.					
Environmental Data					
Shock Resistance	1/2 Sine wave duration for 11 ms			50	g
Vibration Resistance	From 10 - 2000 Hz			10	g
Ambient Temperature	10 °C/ minute max. allowable	-40		125	°C
Storage Temperature	10 °C/ minute max. allowable	-55		125	°C
Soldering Temperature	5 sec. dwell			260	°C
Material of Case	Themoseit / Ceramic				
Material of pads	Au plated				

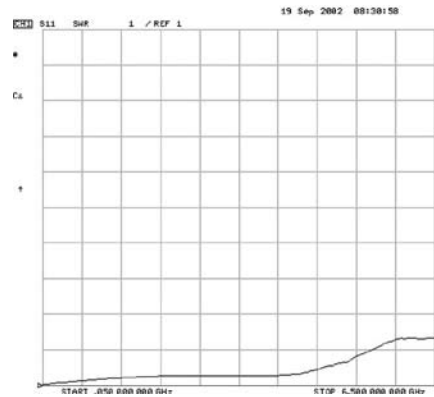
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Insertion Loss:



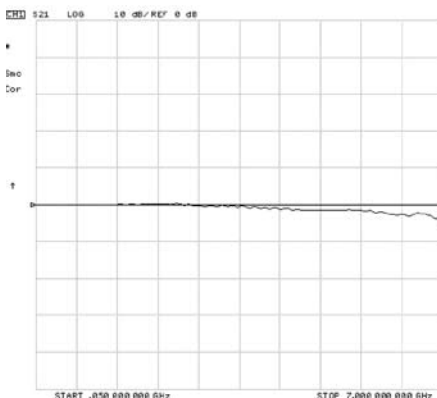
Insertion loss tested to 7 GHz for the CRF Reed Relay. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.

VSWR:



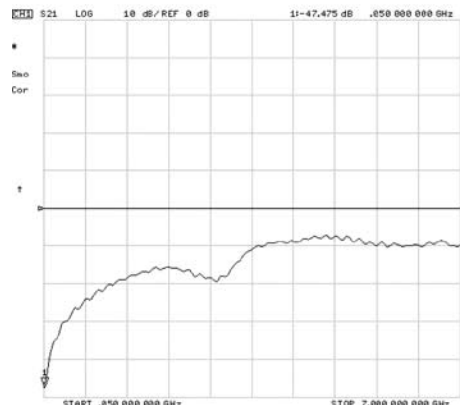
Voltage Standing Wave Ratio (VSWR) tested to 6.5 GHz for the CRF Reed Relays. Horizontal full scale: 6.5 GHz. Vertical scale: 1.0/div referenced from the bottom line 1.0 mark.

Copper Wire Insertion Loss:



Insertion loss tested to 7 GHz for the CRF Reed Relay but with the internal Reed Switch replaced with a bare copper wire. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.

Isolation:



Isolation tested to 7 GHz for the CRF Reed Relay. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.