7000 Series/High Reliability Reed Relays

Parameters	Test Conditions	Units	Form A, B, Latch	Form C	Form A[4] Hg Wet	Form C[4] Hg Wet	Form A High Voltage	Form A Sensor (7003-5193)
CONTACT RATINGS								
Switching Voltage	Max DC/Peak AC Resist.	Volts	200	150	500	500	500	50
Switching Current	Max DC/Peak AC Resist.	Amps	0.5	0.25	1.0	1.0	0.5	0.05
Carry Current	Max DC/Peak AC Resist.	Amps	2.0	0.5	2.0	2.0	2.0	0.5
Contact Rating	Max DC/Peak AC Resist.	Watts	10	3	50	50	10	3
Life Expectancy-Typical [1]	Signal Level 1.0V,10mA	x 10^6 Ops.	1000	100	1000	1000	100	100
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.100	0.150	0.075	0.100	0.100	0.200
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.150	0.200	0.100	0.150	0.150	N/A
RELAY SPECIFICATIONS								
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10^{12}	10^{10}	10^{12}	10^9	10^{12}	10^{10}
Capacitance - Typical	No Shield	pF	1.0	2.0	1.0	2.0	1.0	1.0
Across Open Contacts	Shield Guarding	pF	0.2	1.0	0.2	1.0	0.2	0.2
Dielectric Strength (minimum)	Between Contacts	VDC/peak AC	250	200	1000	1000	1200	200
	Contacts to Shield	VDC/peak AC	1000	1000	1000	1000	1000	N/A
	Contacts/Shield to Coil	VDC/peak AC	1500	1500	1500	1500	1500	2850
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	1.0	2.0.	2.0	2.0	1.0	0.35
Release Time - Typical	Zener-Diode Suppression[3]	msec.	0.1	2.5	1.0	1.5	0.1	0.25

Dot stamped on top of relay refers to pin #1 location

(See following pages for schematic diagrams and coil data.)

Notes:

[1] Consult factory for life expectancy at other switching loads.

[2] Optional coil suppression diode Pin #1 is +.

[3] Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

[4] Hg Content: Form A, 0.04 grams per capsule; Form C, 0.072 grams per capsule.

Environmental Ratings:

Storage Temp: -35°C to +100°C;
Operating Temp: -20°C to +85°C
Solder Temp: 270°C max; 10 sec. max
The operate and release voltage and the coil resistance are specified at 25°C. These values vary by approximately 0.4% / °C as the ambient temperature varies.
Vibration: 20 G's to 2000 Hz; Shock: 50 G's

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