

High Voltage Reed Relays



DESCRIPTION

High voltage relay having up to 10 kVDC switching and 15 kVDC breakdown voltage contact to coil.

FEATURES

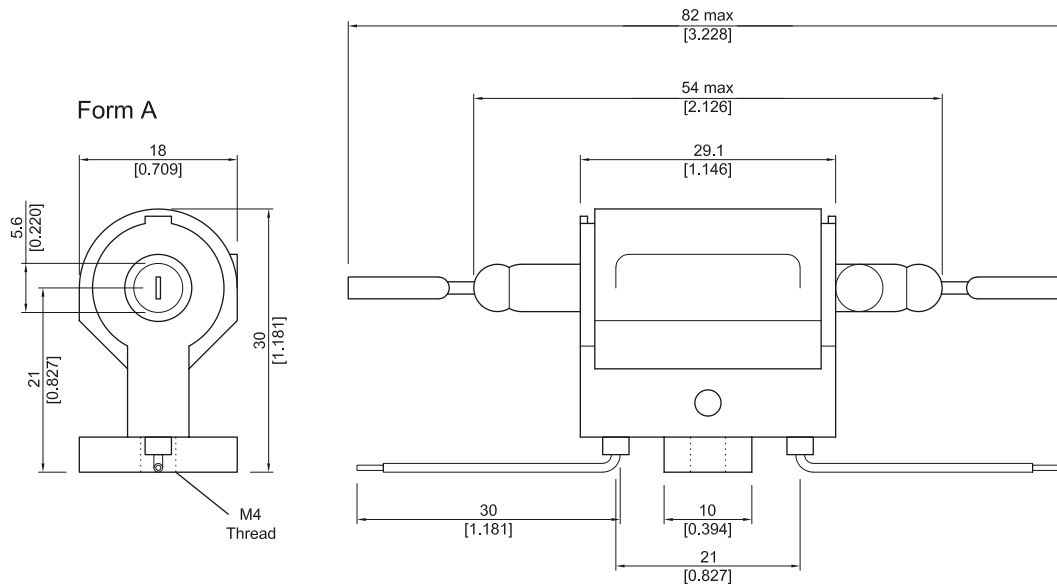
- Form A and B options
- Switching up to 10 kVDC
- 1000 Gigaohm between coil and contact
- Breakdown voltage of 15 kVDC

CHARACTERISTICS

- Coil covered with a thermoplastic that meets UL94V-0

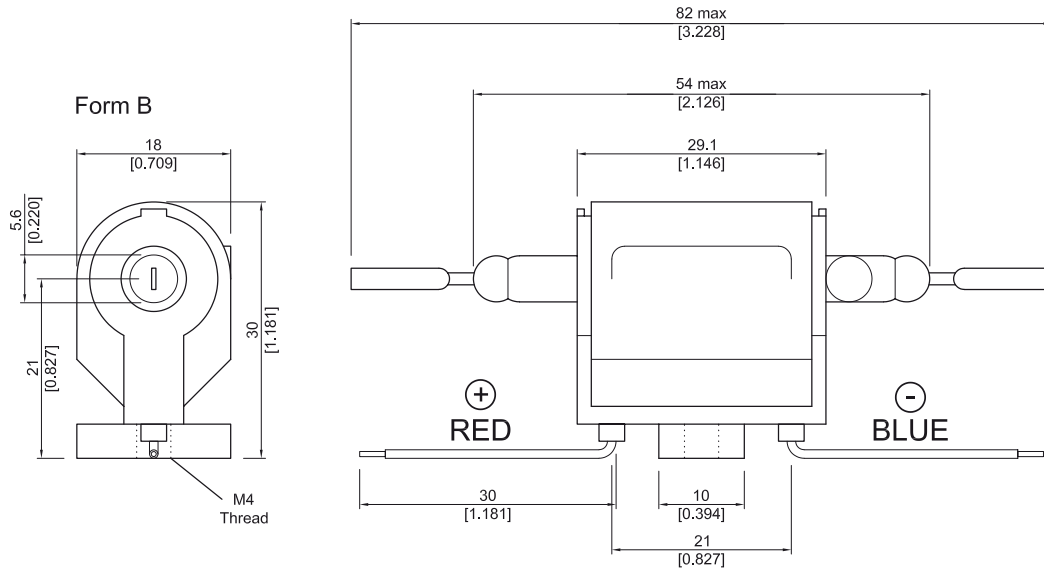
DIMENSIONS

All dimensions in mm [inch]



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ORDER INFORMATION

Series	Nominal Voltage	Contact Form	Switch Model
H	XX -	1X	XX
Options	12, 24	A, B	69, 83

Part Number Example

H24 - 1A83

24 is the nominal voltage
1A is the contact form
83 is the switch model

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RELAY DATA

All Data at 20° C	Switch Model → Contact Form →	Switch 69 Form A / B			Switch 83 Form A / B			Unit
	Conditions	Min.	Typ.	Max.	Min.	Typ.	Max.	
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			50			50	W
Switching Voltage	DC or peak AC			10			7.5	kV
Switching Current	DC or peak AC			3.0			3.0	A
Carry Current	DC or peak AC			5.0			5.0	A
Static Contact Resistance	w/ 0.5 V & 10mA			150			150	mΩ
Insulation Resistance across Contacts	100 volts applied	10 ¹⁰ 10 ¹²			10 ⁹ 10 ¹²			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	15 15			10 15			kVDC
Operation Time incl. Bounce	Measured w/ 100 % overdrive			3.0			3.0	ms
Release Time	Measured w/ no coil suppression			1.5			1.5	ms
Capacitance	at 10 kHz cross contact		0.8 8			0.8 8		pF
Life Expectancies								
Switching 5 V - 10 mA	DC only & <10 pF stray cap.		NA			50		10 ⁶ Cycles
For other load requirements please see our life test section on P. 120.								
Environmental Data								
Shock Resistance	1/2 sinus wave duration 11 ms			50			30	g
Vibration Resistance	From 10 - 2000 Hz			20			10	g
Ambient Temperature	10°C/ minute max. allowable	-20		70	-20		70	°C
Stock Temperature	10°C/ minute max. allowable	-25		85	-25		85	°C
Soldering Temperature	5 sec.			260			260	°C

COIL DATA

Contact Form	Switch Model	Coil Voltage		Coil Resistance			Pull-in Voltage	Drop-out Voltage	Nominal Coil Power
All Data at 20 °C		VDC		Ω			VDC	VDC	mW
		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
1A	69 83	12	16	207	230	253	8.4	1.8	625
		24	30	630	700	770	16.8	3.6	822
1B **	69 83	12	16	162	180	198	8.4	1.8	800
		24	30	585	650	715	16.8	3.6	886

* The pull-in / drop-out voltage and coil resistance will change at rate of 0.4% per °C.
 ** Re-closure of Form B may occur if the max. coil voltage is exceeded. Coil polarity on Form B must be observed. Pin 2 is positive.