

## High Voltage Reed Relays



## CHARACTERISTICS

- Coil covered with a thermoplastic that meets UL94V-0

## DESCRIPTION

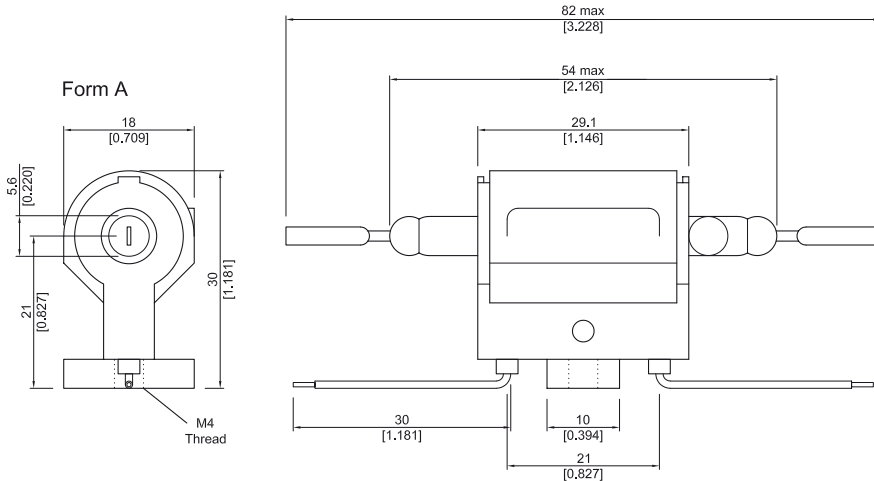
High voltage relay having up to 10 kVDC switching and 15 kVDC breakdown voltage contact to coil.

## FEATURES

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

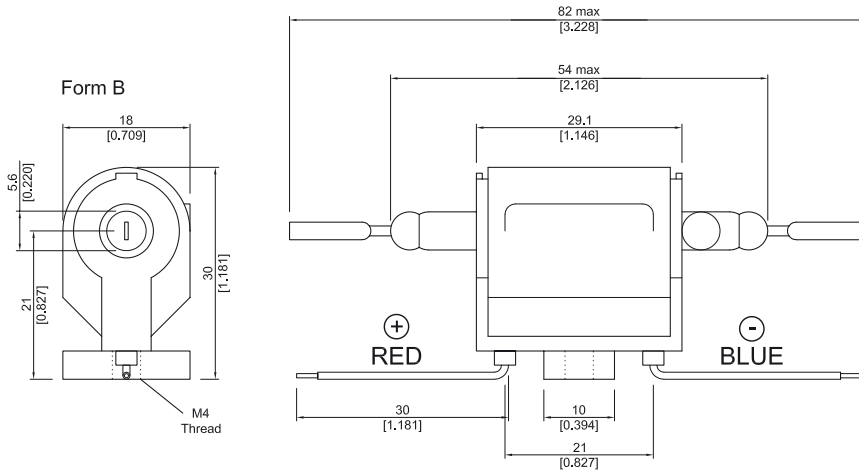
## DIMENSIONS

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
		Min.	Typ.	Max.	Min.	Typ.	Max.	
<b>Contact Ratings</b>	<b>Conditions</b>							
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 <sup>10</sup> 10 <sup>12</sup>			10 <sup>9</sup> 10 <sup>12</sup>			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
<b>Life Expectancies</b>								
Switching 5 V - 10 mA	DC only & <10 pF stray cap.		NA			50		10 <sup>6</sup> Cycles
For other load requirements please see our life test section on P. 120.								
<b>Environmental Data</b>								
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 Volage	Nominal Coil Powe
<b>All Data at 20 °C</b>		VDC		Ω			VDC	VDC	mW
		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
<b>1A</b>	<b>69 83</b>	12	16	207	230	253	8.4	1.8	625
		24	30	630	700	770	16.8	3.6	822
<b>1B **</b>	<b>69 83</b>	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.