A Global Leader in the Design, Development, and Manufacture of Sensor and Magnetic Components
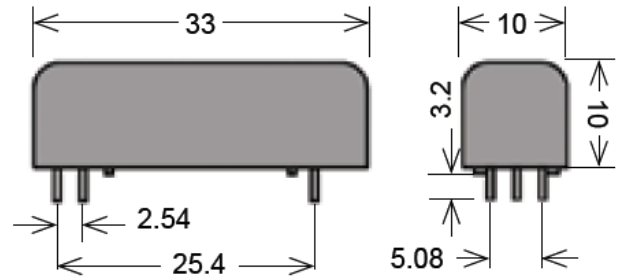
BE Series
Reed Relays

> Features: Latching or High IR, Plastic or Metal Housing, High Life Expectancy, Variety of Pin Out Schemes
> Applications: General purpose, Test Equipment, Medical equipment & Others
> Markets: Telecommunications, Medical, Test & Measurement & Others

Part Description:　　　　**B E 0 0 - 0 X 0 0 - X**

Nominal Voltage	Contact QTY	Contact Form	Switch Model	Casing Option*
05, 12, 24	1, 2, 3, 4, 5	A, B, C, E	31, 66, 85, 90	P, M, V

Customer Options				
Switch Model	**66**	**85**	**90**	**Unit**
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	10	100	10	W
Switching Voltage (max.) DC or peak AC	200	1,000	175	V
Switching Current (max.) DC or peak AC	0.5	1.0	0.5	A
Carry Current (max.) DC or peak AC	1.25	2.5	1.2	A
Contact Resistance (max.) @ 0.5V & 50mA	150	150	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	0.225	2.5	0.2	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	0.5	1.1	0.7	ms
Release Time (max.) Measured with no Coil Excitation	0.1	0.1	1.5	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{10}	10^{12}	10^{9}	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.2	0.5	1.0	pF

Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	66	05	140 (345)	3.5	0.75	179 (72)
		12	855 (2,145)	8.4	1.8	168 (67)
		24	3,285 (7,845)	16.8	3.6	175 (73)
	85	05	105 (140)	3.5	0.75	238 (179)
		12	620 (1,000)	8.4	1.8	232 (144)
		24	1,400 (2,300)	16.8	3.6	411 (250)
1B	66	12	(1,100)	8.4	1.8	131
		24	(4,240)	16.8	3.6	136
1C	90	12	2,145	8.4	1.8	67
		24	7,845	16,8	3.6	73
2A	66	12	445 (1,100)	8.4	1.8	324 (131)
		24	1,700 (4,240)	16.8	3.6	339 (136)
	85	05	70 (110)	3.5	0.75	357 (227)
		12	420 (600)	8.4	1.8	343 (240)
		24	1,080 (1,600)	16.8	3.6	533 (360)
2A + 2B	85	05	49	3.5	0.25	510
		12	303	8.4	0.7	475
		24	1,140	16.8	1.4	505

The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.
The figures in brackets are for realys in metal casing.

Environmental Data		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 70	°C
Storage Temperature	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

BE Reed Relay

Handling & Assembly Instructions

➢ Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.

➢ External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.

➢ Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.

➢ Wave soldering: maximum 260°/5 seconds.

➢ Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

Life Test Data

*Load increase reduces life expectancy of Reed Switches

Modifications in the sense of technical progress are reserved.
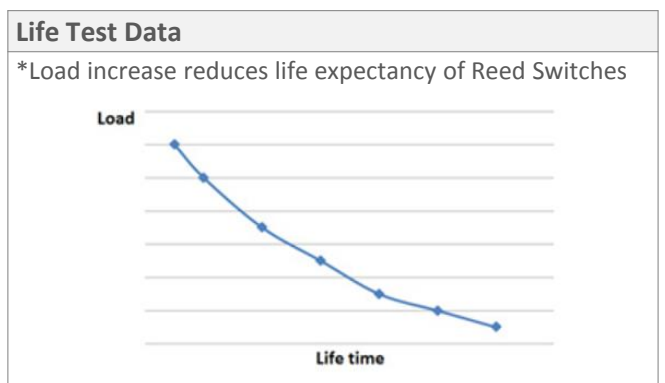
Glossary Contact Form

Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

Pin Out

View from top of component
2.54mm [0.10"] pitch grid

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→ UP
ONLY WHEN USING THE
MERCURY WETTED (88) SWITCH

11

4.5 kVDC

14

Coil 1   Coil 2

15

20

→ UP
ONLY WHEN USING THE
MERCURY WETTED (88) SWITCH

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