

BC4

► FEATURES

- 2 Form C contact, polarized relay
- High sensitivity 150mW
- Matching 16 pin IC socket
- High switching capacity 60W, 125VA
- Epoxy sealed for automatic wave soldering and cleaning 16 pin IC socket



► CONTACT DATA

Contact Arrangement	DPDT (2 Form C)
Initial Contact Resistance	50m ohm
Contact Material	Ag-AuAg8, AgPd60
Rated load (Res. Load)	2A, 30VDC, 1A 125VAC
Max. switching power	60W, 125VA
Max. switching Voltage	220VDC, 250VAC
Max. switching current	2A
Min. Applicable Load	10mV 10 micro A
Electrical Life	1 x 10 ⁵ ops (2A 30VDC), 5 x 10 ⁵ ops (1A 30VDC)
Mechanical Life	1 x 10 ⁸ ops

► OPERATION CONDITION

Initial Insulation resistance		1000M ohm 500VDC
Operate time (nominal voltage)		Max. 4ms
Release time (nominal voltage)		Max. 3ms
Set time (Latching)		3ms
Reset time(Latching)		3ms
Bounce time		Max. 1.5ms
Dielectric strength	Coil and contacts	1,500Vrms, 1min(1 coil) 1,000Vrms, 1min(2 coil)
	Between contacts	1,000Vrms, 1min
Vibration resistance		196 m/s ² (20g) 10 to 55Hz
Shock resistance	Functional	490m/s ² (50g)
	Destructive	980m/s ² (100g)
Ambient temperature		-40°C~+85°C
Humidity		5% to 85% R.H.
Capacitance between	Contacts	2.0p
	Contact sets	1.5p
	Contact to coil	5.0p
Max. Solder Temp. Time		270°C 5s
Max. Solvent Temp. Time		80°C 30s
Termination		DIP & PCB
Unit weight		Approx. 4.5g
Construction		Sealed

► **COIL**

Coil power		Sensitive	Standard
	Single side stable	150mW	200mW
	Latching 2 coil	150mW	200mW
	Latching 1 coil	75mW	100mW
Temperature Rise		Max. 65°C	
Coil Voltage		See coil data table	

► **COIL DATA**

Single side stable

standard(200mW) 20°C

Order Number	Normal Voltage (VDC)	Pick-up voltage VDC (Max.)	Drop-out voltage VDC (Min.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
3	3	2.30	0.3	45	6
5	5	3.75	0.5	125	10
6	6	4.50	0.6	180	12
9	9	6.75	0.9	405	18
12	12	9.00	1.2	720	24
15	15	11.25	1.5	1,125	30
24	24	18.00	2.4	2,880	48
48	48	36.00	4.8	11,520	96

Single side stable

sensitive(150mW) 20°C

Order Number	Normal Voltage (VDC)	Pick-up voltage VDC (Max.)	Drop-out voltage VDC (Min.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
3H	3	2.4	0.3	60	7.0
5H	5	4.0	0.5	167	11.5
6H	6	4.8	0.6	240	13.8
9H	9	7.2	0.9	540	20.8
12H	12	9.6	1.2	960	27.7
15H	15	12.0	1.5	1,500	34.6
24H	24	19.2	2.4	3,840	55.4

Latching (1 coil)

standard(100mW) 20°C

Order Number	Normal Voltage (VDC)	Set/Reset voltage VDC (Max.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
3-L1	3	2.25	90	8.4
5-L1	5	3.75	250	14
6-L1	6	4.50	360	17
9-L1	9	6.75	810	25
12-L1	12	9.00	1,440	34
15-L1	15	11.25	2,220	42
24-L1	24	18.00	4,000	56

Latching (2 coil)

standard(200mW) 20°C

Order Number	Normal Voltage (VDC)	Set/Reset voltage VDC (Max.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
3-L2	3	2.25	45	6
5-L2	5	3.75	125	10
6-L2	6	4.50	180	12
9-L2	9	6.75	405	18
12-L2	12	9.00	720	24
15-L2	15	11.25	1,125	30
24-L2	24	18.00	2,040	48

Latching (1 coil)

sensitive(75mW) 20°C

Order Number	Normal Voltage (VDC)	Set/Reset voltage VDC (Max.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
5H-L1	5	4.0	330	16
6H-L1	6	4.8	480	19
9H-L1	9	7.2	1,080	29
12H-L1	12	9.6	1,920	39
15H-L1	15	12.0	3,000	43
24H-L1	24	19.2	7,680	78

Latching (2 coil)

sensitive(150mW) 20°C

Order Number	Normal Voltage (VDC)	Set/Reset voltage VDC (Max.)	Coil resistance Ω (10%)	allowable Voltage VDC(Max.)
5H-L2	5	4.0	167	11.5
6H-L2	6	4.8	240	13.8
9H-L2	9	7.2	540	20.8
12H-L2	12	9.6	960	27.7
15H-L2	15	12.0	1,500	34.6
24H-L2	24	19.2	3,840	55.4

► SAFETY APPROVED RATING

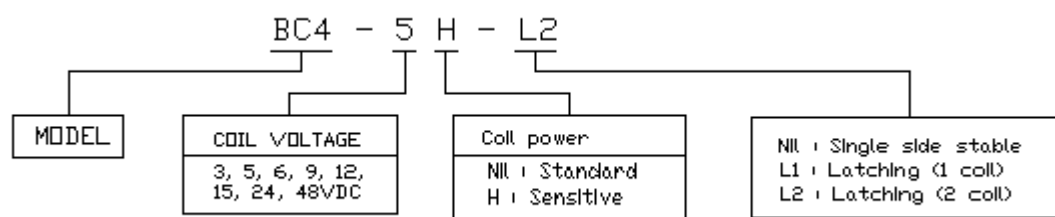
UL	0.5A 60VDC 2A 25VDC, 1A 100VAC (Industrial control, business equipment) 1A 120VAC (Telephone equipment)
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► SAFETY APPROVED RATING

Voltage	Power	Number of operations	
		Resistive Load	Inductive Load(cos phi=0.7)
50mV	50 μ W	5×10^7	5×10^7
30VDC	20W	3×10^6	1×10^6
30VDC	30W	1×10^6	3×10^{75}
30VDC	60W	1×10^5	1.5×10^{74}
60VDC	20W	3×10^6	--
60VDC	30W	5×10^5	--

60VDC	60W	1×10^5	--
30VAC	40VA	3×10^6	1×10^6
30VAC	80VA	1×10^6	3×10^5
30VAC	120VA	1×10^5	1.5×10^4
60VAC	40VA	3×10^6	1×10^6
60VAC	80VA	1×10^6	3×10^5
60VAC	120VA	1×10^5	1.5×10^4
125VAC	40VA	3×10^6	1×10^6
125VAC	80VA	1×10^6	3×10^5
125VAC	125VA	1×10^5	1.55×10^4

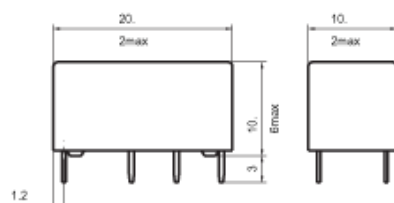
► ORDERING INFORMATION



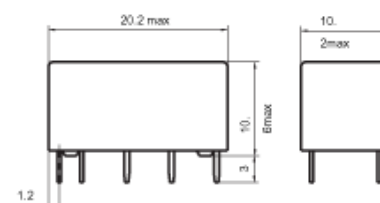
► DIMENSIONS (UNIT: MM)

Single side stable or latching(1 coil)

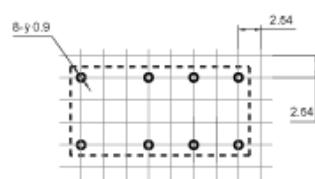
Outline Dimensions



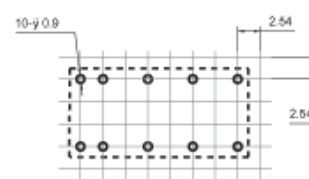
Latching(2 coils)



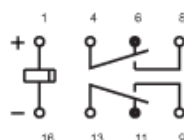
PCB layout



Matching 16 pin IC socket



Matching 16 pin IC socket

Wiring Diagram
(Bottom view)

For latching, diagram shows the "reset" position
Energize terminals 1 and 16 to "set"
Reverse energize terminals 1 and 16 to "reset"

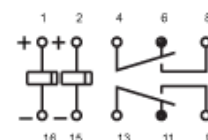


Diagram shows the "reset" position
Energize terminals 1 and 16 to "set"
Energize terminals 2 and 15 to "reset"

► CHARACTERISTICS CURVE

