



Datasheet

2CO PCB Mount Non-Latching Relay, 2 A, 24V

RS Stock 800-4536



Features

- Offers excellent board space savings
- Surge withstand voltage up to 2500V, meets FCC Part 68 and Telecordia
- Meets EN60950/EN41003
- SMT and DIP types available
- High contact capacity 2A 30VDC
- Low power consumption
- Single side stable and latching type available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (10.0 x 6.5 x 5.4) mm

(Res. load) 0.5A 125VAC Max. switching current 2A Max. switching voltage 250VAC / 220VDC Max. switching power 62.5VA / 60W Min. applicable load 1) 10mV 10μA	CONTACT DATA	
Contact material Contact rating (Res. load) Max. switching current Max. switching voltage Max. switching power Min. applicable load 1) Mechanical endurance Silver alloy+ Au plated 2A 30VDC 0.5A 125VAC 2A 250VAC / 220VDC Max. switching power 62.5VA / 60W 1 x 10 ⁸ ops 1 x 10 ⁵ ops (at 2A 30VDC)	Contact arrangement	2C
Contact rating (Res. load) 2A 30VDC (Res. load) Max. switching current 2A Max. switching voltage 250VAC / 220VDC Max. switching power 62.5VA / 60W Min. applicable load 1) 10mV 10μA Mechanical endurance 1 x 10 ⁵ ops (at 2A 30VDC)	Contact resistance	70mΩ max. (at 0.1A 6VDC)
(Res. load) 0.5A 125VAC Max. switching current 2A Max. switching voltage 250VAC / 220VDC Max. switching power 62.5VA / 60W Min. applicable load ¹⁾ 10mV 10μA Mechanical endurance 1 x 10 ⁵ ops (at 2A 30VDC)	Contact material	Silver alloy+ Au plated
Max. switching current 2A Max. switching voltage 250VAC / 220VDC Max. switching power 62.5VA / 60W Min. applicable load 1) 10mV 10μA Mechanical endurance 1 x 10 ⁵ ops (at 2A 30VDC)	Contact rating	2A 30VDC
Max. switching voltage 250VAC / 220VDC Max. switching power 62.5VA / 60W Min. applicable load ¹⁾ 10mV 10μA Mechanical endurance 1 x 10 ⁵ ops (at 2A 30VDC)	(Res. load)	0.5A 125VAC
Max. switching power 62.5VA / 60W Min. applicable load ¹⁾ 10mV 10μA Mechanical endurance 1 x 10 ⁵ ops (at 2A 30VDC)	Max. switching current	2A
Min. applicable load ¹⁾ Mechanical endurance 1 x 10 ⁸ ops 1 x 10 ⁵ ops (at 2A 30VDC)	Max. switching voltage	250VAC / 220VDC
Mechanical endurance 1 x 10 ⁸ ops 1 x 10 ⁵ ops (at 2A 30VDC)	Max. switching power	62.5VA / 60W
1 x 10 ⁵ ops (at 2A 30VDC)	Min. applicable load 1)	10mV 10μA
Electrical endurance	Mechanical endurance	1 x 10 ⁸ ops
Electrical endurance 1 x 10 ⁵ ops (at 0.5A 125VAC)	=	1 x 10 ⁵ ops (at 2A 30VDC)
	Electrical endurance	1 x 10 ⁵ ops (at 0.5A 125VAC)

COIL			
Coil power	Single side stable	See "COIL DATA"	
	1 coil latching	See "COIL DATA"	
Temperature rise	50K max.(At 1A load, 85°C environment		

CHAR	ACTERISTICS			
Insulation	resistance	1000MΩ (at 500VDC)		
	Between coil & contacts	1600VAC 1min		
Dielectric strength	Between open contacts	1000VAC 1min		
ou ongui	Between contact sets	1800VAC 1min		
Surge with	stand voltage			
Between open contacts (10/160µs)		1500VAC (FCC part 68)		
Between coil & contacts (2/10µs)		2500VAC (Telecordia)		
Operate ti	me (Set time)	3ms max.		
Release ti	me (Reset time)	3ms max.		
Ambient te	emperature	-40°C to 85°C		
Humidity		5% to 85% RH		
Vibration r	esistance	10Hz to 55Hz 3.3mm DA		
Shock resistance	Functional	735m/s ²		
	Destructive	980m/s		
Terminatio	n	DIP, SMT		
Unit weight		Approx. 0.8g		
Construction		Plastic sealed		



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COIL DATA at 23°C

Single side stable

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Coil Code	Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Coil Resistance Ω	Nominal Power mW approx.	Max. Allowable Voltage VDC
HFD4/1.5	1.5	1.13	0.15	16 x (1±10%)	140	2.2
HFD4/2.4	2.4	1.8	0.24	41 x (1±10%)	140	3.6
HFD4/3	3	2.25	0.3	64.3 x (1±10%)	140	4.5
HFD4/4.5	4.5	3.38	0.45	145 x (1±10%)	140	6.7
HFD4/5	5	3.75	0.5	178 x (1±10%)	140	7.5
HFD4/6	6	4.5	0.6	257 x (1±10%)	140	9.0
HFD4/9	9	6.75	0.9	579 x (1±10%)	140	13.5
HFD4/12	12	9	1.2	1028 x (1±10%)	140	18.0
HFD4/24	24	18	2.4	2880 x (1±10%)	200	36.0

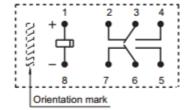
1 coil latching

Coil Code	Nominal Voltage VDC	Set Voltage VDC max.	Reset Voltage VDC max.	Coil Resistance Ω	Nominal Power mW approx.	Max. Allowable Voltage VDC
HFD4/1.5-L	1.5	1.13	1.13	22.5 x (1±10%)	100	3.0
HFD4/2.4-L	2.4	1.8	1.8	58 x (1±10%)	100	4.8
HFD4/3-L	3	2.25	2.25	90 x (1±10%)	100	6.0
HFD4/4.5-L	4.5	3.38	3.38	203 x (1±10%)	100	9.0
HFD4/5-L	5	3.75	3.75	250 x (1±10%)	100	10.0
HFD4/6-L	6	4.5	4.5	360 x (1±10%)	100	12.0
HFD4/9-L	9	6.75	6.75	810 x (1±10%)	100	18.0
HFD4/12-L	12	9	9	1440 x (1±10%)	100	24.0
HFD4/24-L	24	18	18	2880 x (1±10%)	200	36.0

Wiring Diagram

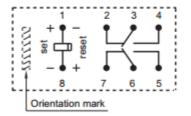
(Bottom view)

Single side stable



No energized condition

1 coil latching



Reset condition

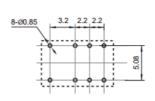


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Outline Dimensions

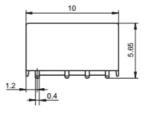
DIP type

6.5

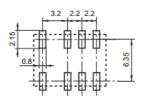


PCB Layout (Bottom view)

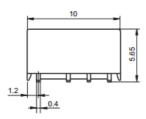




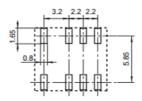




Short terminal SMT type

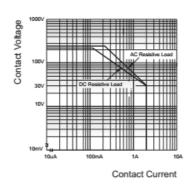


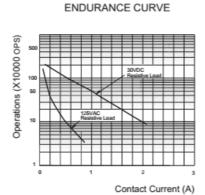




CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER





REFLOW WELDING, TEMPERATURE ON PCB BOARD RECOMMENDED WELDING TEMPERATURE

