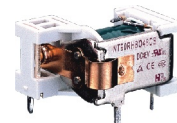


DB ELECTRO^U_Z

Présente / Presents:

NINGBO HUAGUAN ELECTRONICS CO.,LTD.





14.0x9.0x5.0



US E158859 R5604271 Patent No: 02217796.5

P

Features
 • DIL Pitch Terminals, High Sensitivity 0.14W or 0.10W Nominal Power.
 • Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC.
 • Monostable or bistable relays Single and double Coil magnet latching Type available.
 • Application for Telecommunication Equipment, Office Equipment, Security Alarm Systems, Measuring instruments, Medical Monitoring Equipment, Audio Visual Equipment, Flight Simulator, Sensor Control.

Ordering Information

P	L	12	W
1	2	3	4
1 Part number: P		3 Coil rated voltage(V): DC:3,4,5,5,6,9,12,24	
2 Operating function: NIL: Single Side Stable;		4 Contact material: NIL: AgPd; W: AgNi	
L:1 Coil Latching; K:2 Coil Latching			

Contact Data

Contact Arrangement	2C (DPDT(B-M)) (Bifurcated Crossbar)
Contact Material	AgPd(Stationary Contact; Gold clad) AgNi(Gold clad)
Contact Rating (resistive)	1A, 2A/30VDC; 0.5A/125VAC
Max. Switching Power	60W 62.5VA
Max. Switching Voltage	220VDC 250VAC
Contact Resistance or Voltage drop	≤50mΩ Item 3.12 of IEC255-7
Operation life	Electrical 1A/30VDC; 2x10 ⁸ (Ag Ni); 1x10 ⁷ 0.5A/125VAC; 1x10 ⁶ Item 3.30 of IEC255-7 Mechanical 10 ⁷ Item 3.31 of IEC255-7

CAUTION:
 Relays previously tested or used above 10mA resistive at 6V maximum (DC or peak AC) open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pick up voltage VDC(max) (75% of rated voltage)	Release voltage VDC(min) (10% of rated voltage)	Coil power W	Operate Time ms	Release /Reset Time ms		
	Rated	Max.								
P-003	3	7.5	64.3	2.25	0.3	0.14	Approx. 2	Approx. 1		
P-004	4.5	11.25	144.6	3.38	0.45	0.14				
P-005	5	12.5	178	3.75	0.5	0.14				
P-006	6	15.0	257	4.50	0.6	0.14				
P-009	9	22.5	579	6.75	0.9	0.14				
P-012	12	30.0	1028	9.00	1.2	0.14				
P-024	24	48.0	2880	18.0	2.4	0.20				
1 Coil Latching			Reset(Max)			Reset				
PL-003	3	8.7	90	2.25	-2.25	0.10			Approx. 2	Approx. 1
PL-004	4.5	13.0	202.5	3.38	-3.38	0.10				
PL-005	5	14.5	250	3.75	-3.75	0.10				
PL-006	6	17.4	360	4.50	-4.50	0.10				
PL-009	9	26.1	810	6.75	-6.75	0.10				
PL-012	12	34.8	1440	9.00	-9.00	0.10				
PL-024	24	57.6	3840	18.0	-18.0	0.15				
2 Coil Latching			Set Coil	Reset Coil	Reset(Max)		Reset			
PK-003	3	6	45	45	2.25	0.20	Approx. 2	Approx. 1		
PK-004	4.5	9	101	101	3.38	0.20				
PK-005	5	10	125	125	3.75	0.20				
PK-006	6	12	180	180	4.50	0.20				
PK-009	9	18	405	405	6.75	0.20				
PK-012	12	24	720	720	9.00	0.20				
PK-024	24	36	1920	1920	18.0	0.30				

CAUTION:
 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2. Pickup and release(reset) voltage are for test purposes only and are not to be used as design criteria.
 3. When latching relays are installed in equipment, the latch and reset coil should not be pulsed simultaneously. Coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operate time of the relay. If these conditions are not followed, it is possible for the relay to be in the magnetically neutral position.

Characteristics

Electrostatic capacitance		
Between open Contacts	Approx. 0.4pF	Item 3.41 of IEC255-7
Between coil & Contacts	Approx. 0.9pF	Item 3.41 of IEC255-7
Between Contact Poles	Approx. 0.2pF	Item 3.41 of IEC255-7
Insulation Resistance	1000MΩ min(at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between open Contacts	1000VAC 1min	Item 6 of IEC255-5
Between coil & Contacts	1000VAC 1min	Item 6 of IEC255-5
Between Contact Poles	1000VAC 1min	Item 6 of IEC255-5
Surge Withstand Voltage		
Between open Contacts	1500V	FCC68
Between coil & Contacts	1500V	FCC68
Between Contact Poles	2500V	FCC68
Shock resistance	Functional:500m/s ² 11ms; Survival:1000 m/s ² 6ms	IEC68-2-27 Test Ea
Vibration resistance	10-55Hz Double amplitude Functional: 3mm Survival:5mm	IEC68-2-6 Test Fc
Terminals strength	5N	IEC68-2-21 Test Ua1
Solderability	235°C ±2°C 3±0.5s	IEC68-2-20 Test Ta method 1
Temperature Range	-40-70°C (-40-158°F)	
Mass	1.5g	

Qualification inspection:

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

Safety approvals

Safety approval	UL&CUR	TUV
Load	1A, 2A/30VDC, 0.5A/125VAC	1A/30VDC, 0.5A/125VAC

Dimensions

mm/inch

Dimensions
 Index Mark
 14max. 0.55max.
 0.137max.
 0.137
 0.137
 0.137
 0.5
 0.24
 0.25
 0.51
 7.52
 0.3

Wiring diagram (Bottom view)
 Single Side stable
 1 Coil latching
 2 Coil latching
 Index mark (De-energized Position)
 Index mark (Reset Position)
 Index mark (Reset Position)
 S: Set
 R: Reset (Bottom View)

Mounting (Bottom view)
 2.54
 0.1
 10.01
 0.394
 Tolerance: ±0.10, 0.004

NOTES
 1) Dimensions are in millimeters.
 2) Inch equivalents are given for general information only.