# SPECIFICATION

# JZC49FD

# SUBMINIATURE POWER RELAY

CONTACT DATA	
Contact arrangement	1A
Contact resistance	100mΩ(at 1A 6VDC)
Contact material	AgSno2 ,AgNi
Contact rating (Res. load)	5A 250VAC/30VDC
Max. switching voltage	250VAC/30VDC
Max. switching current	5A
Max. switching power	1250VA/150W
Mechanical endurance	2 x 10 <sup>7</sup> ops
Electrical endurance	1 x 10 <sup>5</sup> ops
Contact rating (Res. load)	5A 250VAC/30VDC
Min.contact load	No gold plated:5VDC 50mA Gold plated:5VDC 1mA

CHAR	ACTER	STICS	
Insulation resistance		1000MΩ (at 500VDC)	
Dielectric	Between coil & contacts		3000VAC 1min
strength	Between open contacts		1000VAC 1min
Operate time (at nomi.volt.)		10ms max.	
Release time (at nomi.volt.)		5ms max.	
Shock resistance		Functional	98m/s²
		Destructive	980m/s <sup>2</sup>
Vibration resistance		10Hz to 55Hz 1.5mm DA	
Humidity		5% to 85% RH	
Ambient temperature		-40°C to 85°C	
Termination		PCB	
Unit weight		Approx. 3g	
Construction		Plastic sealed	

Notes: 1) The data shown above are initial values.

Please find coil temperature curve in the characteristic curves below.

3) UL insulation system: Class F, Class B, Class A.

COIL	
Coil power	Approx. 120mW (at 5VDC to 18VDC)
Coli powei	Approx. 180mW (at 24VDC)

COIL DATA at 23				at 23°C
Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Allowable Voltage VDC at 85°C	Coil Resistance Ω
5	3.50	0.25	6.0	208 x (1±10%)
6	4.20	0.30	7.2	300 x (1±10%)
9	6.30	0.45	10.8	675 x (1±10%)
12	8.40	0.60	14.4	1200 x (1±10%)
18	12.6	0.90	21.6	2700 x (1±15%)
24	16.8	1.20	28.8	3200 x (1±15%)

Notes: 1) All above data are tested when the relays terminals are downward position. Other positions of the terminals, the pick-up and dropout voltages will have ±5% tolerance. For example, when the relay terminals are transverse position, the max. pick-up voltage change is 75% of nominal voltage.

- 2) The max. allowable voltage in the COIL DATA is coil overdrive voltage, it is the instantaneous max. voltage which the relay coil could endure in a very short time.
- 24VDC 120mW type are also available, please see ordering information for more details.

SAFETY APPROVAL RATINGS				
UL/CUL	5A 30VDC L/R =0ms 3A 30VDC L/R =0ms			
	5A 250VAC COSØ=1 3A 250VAC COSØ=1			

Notes: Only some typical ratings are listed above. If more details are required, please contact us.



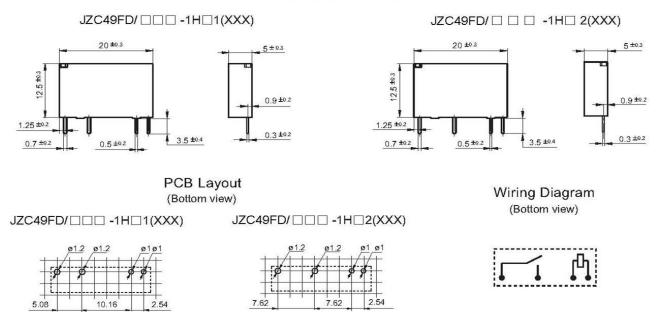
#### ORDERING INFORMATION 012 -1H JZC49FD/ G Type Coil voltage 5, 6, 9, 12,18, 24VDC Contact arrangement 1H: 1 Form A 1: Single contact Contact version 2: Bifurcated contact(Only for gold plated) Space between terminals (See the following) 1: 5.08mm 2: 7.62mm Contact plating G: Gold plated Nil: No gold plated (Only for single contact) **Contact material** T: AgSnO<sub>2</sub> (Only for single contact) Nil: AqNi Insulation standard F: Class A B: Class B Nil: Class F Coil power L: Sensitive 180mW(Only for 24VDC) Nil: Standard 120mW(At 5VDC to 18VDC) Special code2) 009: Socket Type Nil: Standard

Notes: 1) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB.

2) The customer special requirement express as special code after evaluating by Hongfa.

## **OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT**





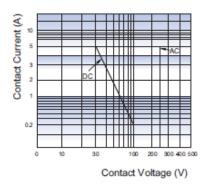
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

- The tolerance without indicating for PCB layout is always ±0.1mm.
- The width of the gridding is 2.54mm.

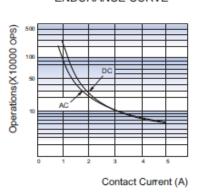


# CHARACTERISTIC CURVES

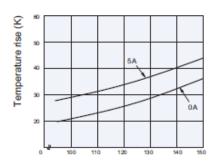
#### MAXIMUM SWITCHING POWER



### ENDURANCE CURVE



#### COIL TEMPERATURE RISE



Percentage Of Nominal Coil Voltage