

1. Application: This data sheet applies to Hybrid stepper motor of 17HD40005-22B.

2. Type and Specification :

2.1 Electrical principle and appearance : refer to outline drawing

2.2 Drive mode : constant current chopping wave

2.3 exciter mode : 2 phase excitation (2 phase four beat operation) , can be rotated in both positive and negative way .

2.4 Turning way : power up at the turn of AB-BC-CD-DA , C.W see from shaft extension end

2.5 Rated current (single phase): 1.5 A DC

2.6 Voltage : 12-36V

2.7 Step angle : 1.8°

2.8 Insulation level : Level B

3. Parameter:

3.1 Working condition : Ambient temperature : $-20 \sim 50^\circ\text{C}$;
Relative humidity: 90%MAX ; Installation location : install axis horizontally or vertically .

3.2 Test conditions(The above parameters were measured under the normal test atmospheric conditions) .

3.3 Winding DC resistance (25°C) : $1.6\Omega \pm 10\%$

3.4 Winding inductance: $3.8\text{mH} \pm 20\%$

3.5 cogging torque: 18mN.m REF

3.6 Holding torque(2 phase rated current): $\geq 420\text{mN.m}$
($I=1.5\text{A}$)

3.7 Maximum no-load start frequency: $\geq 1400\text{pps}$

3.8 Maximum no-load operating frequency: $\geq 8000\text{pps}$

3.9 Temperature rise : $< 80\text{K}$

3.10 Step angle accuracy : $1.8^\circ \pm 5\%$

3.11 moment of inertia : 57g.cm^2

3.12 Motor weight : 0.28Kg/PC REF

3.13 Insulation resistance: The insulation resistance of the cold stator in the stator and the terminal of the motor should be over $100\text{M}\Omega$ (measured by DC500V Megger)

3.14 Dielectric strength : Motor stator core and the terminal should be able to withstand AC600V / 1S no breakdown, leakage current is less than 1mA.