



57mm Hybrid Stepper Series

SPECIFICATIONS:



| | |
|-----------------------|---------------------------------|
| Step Angle | 1.8° (±5% @ full step, no load) |
| Resistance Accuracy | ±10% |
| Inductance Accuracy | ±20% |
| Temperature Rise | ≤80K |
| Ambient Temperature | -20°C to 50°C |
| Shaft Radial Play | ≤0.02mm @ 450g-load |
| Shaft Axial Play | ≤0.02mm @ 450g-load |
| Max Radial Force | 75N @ 20mm from flange |
| Max Axial Force | 15N |
| Dielectric Strength | 500VAC for one minute |
| Insulation Resistance | ≥100MΩ, 500VDC |

SUBMODELS:

The following are common submodels for the LDO-57STH series.

| | Rated Voltage | Current /Phase | Resistance /Phase | Inductance /Phase | Holding Torque | Num. Leads | Rotor Inertia | Approx. Weight | Stall Torque | Body Length |
|------------------|---------------|----------------|-------------------|-------------------|----------------|------------|----------------------|----------------|--------------|-------------|
| Part No. | (V) | (A) | (ohm) | (mH) | (kg-cm) | (l) | (g-cm ²) | (kg) | (kg-cm) | (mm) |
| LDO-57STH41-1006 | 5.7 | 1 | 5.7 | 5.4 | 3.9 | 6 | 120 | 0.45 | 0.21 | 41 |
| LDO-57STH41-2006 | 2.8 | 2 | 1.4 | 1.4 | 3.9 | 6 | 120 | 0.45 | 0.21 | 41 |
| LDO-57STH41-3006 | 1.9 | 3 | 0.63 | 0.6 | 3.9 | 6 | 120 | 0.45 | 0.21 | 41 |
| LDO-57STH41-2804 | 2.0 | 2.8 | 0.7 | 1.4 | 5.5 | 4 | 120 | 0.45 | 0.21 | 41 |
| LDO-57STH51-1006 | 6.6 | 1 | 6.6 | 8.2 | 7.2 | 6 | 275 | 0.65 | 0.36 | 51 |
| LDO-57STH51-2006 | 3.3 | 2 | 1.65 | 2.2 | 7.2 | 6 | 275 | 0.65 | 0.36 | 51 |
| LDO-57STH51-3006 | 2.2 | 3 | 0.74 | 0.9 | 7.2 | 6 | 275 | 0.65 | 0.36 | 51 |
| LDO-57STH51-2804 | 2.3 | 2.8 | 0.83 | 2.2 | 10.1 | 4 | 275 | 0.65 | 0.36 | 51 |
| LDO-57STH56-1006 | 7.4 | 1 | 7.4 | 10 | 9 | 6 | 300 | 0.70 | 0.4 | 56 |
| LDO-57STH56-2006 | 3.6 | 2 | 1.8 | 2.5 | 9 | 6 | 300 | 0.70 | 0.4 | 56 |
| LDO-57STH56-3006 | 2.3 | 3 | 0.75 | 1.1 | 9 | 6 | 300 | 0.70 | 0.4 | 56 |
| LDO-57STH56-2804 | 2.5 | 2.8 | 0.9 | 2.5 | 12.6 | 4 | 300 | 0.70 | 0.4 | 56 |
| LDO-57STH76-1006 | 8.6 | 1 | 8.6 | 14 | 13.5 | 6 | 480 | 1.00 | 0.68 | 76 |
| LDO-57STH76-2006 | 4.5 | 2 | 2.25 | 3.6 | 13.5 | 6 | 480 | 1.00 | 0.68 | 76 |
| LDO-57STH76-3006 | 3.0 | 3 | 1.0 | 1.6 | 13.5 | 6 | 480 | 1.00 | 0.68 | 76 |
| LDO-57STH76-2804 | 3.2 | 2.8 | 1.13 | 3.6 | 18.9 | 4 | 480 | 1.00 | 0.68 | 76 |