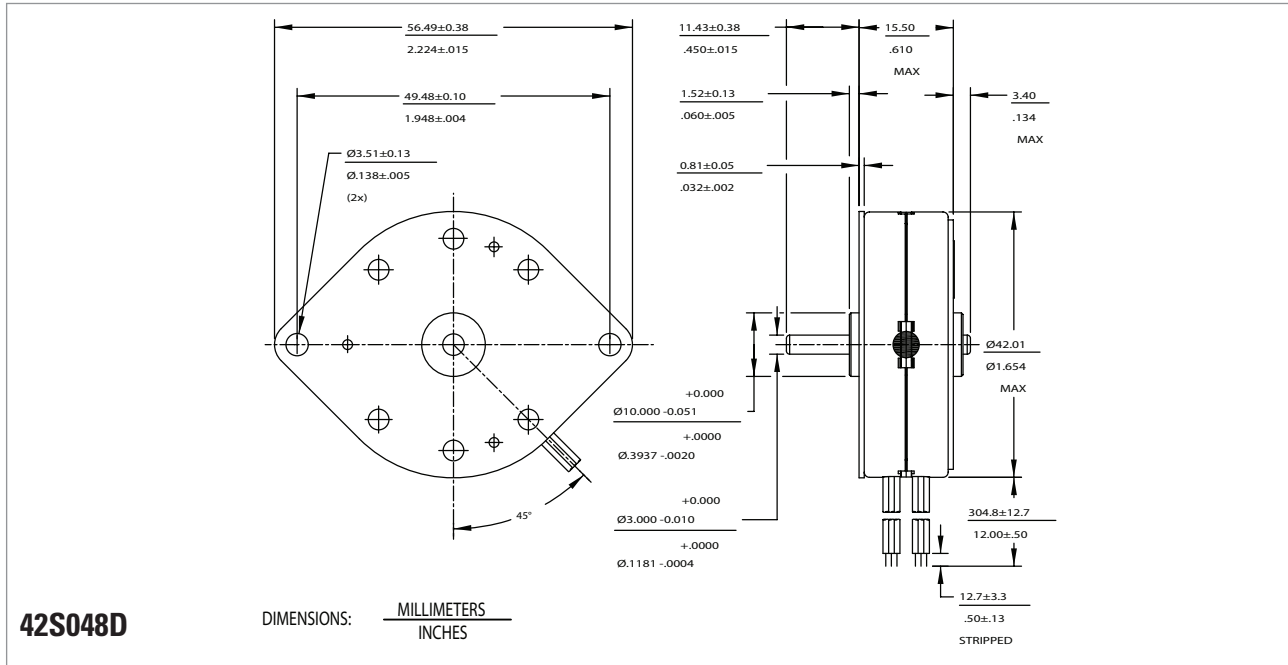


42S048D



Technical Specifications

| Part Number | Unipolar | | Bipolar | | |
|-------------------------------------|---|------------------------|-----------|------------|-------|
| | 42S048D1U | 42S048D2U | 42S048D1B | 42S048D2B | |
| Rated voltage | (vdc) | 5 | 12 | 5 | 12 |
| Resistance per phase ± 10% | (ohms) | 12.50 | 75.00 | 12.50 | 75.00 |
| Inductance per phase, Typ | (mH) | 5.80 | 32.90 | 9.60 | 55.00 |
| Rated current per phase * | (amps) | 0.40 | 0.16 | 0.40 | 0.16 |
| Holding torque, min * | (oz-in / mNm) | 6.3 / 44.4 | | 7.4 / 52.1 | |
| Step angle * | (degrees) | 7.5 ± 0.5° | | | |
| Steps per revolution * | | 48 | | | |
| Detent torque, max | (oz-in / mNm) | 1.7 / 12 | | | |
| Thermal resistance | (°C / watt) | N.A. | | | |
| Rotor moment of inertia | (oz-in-s ² / g-cm ²) | 0.0519 / 9.5 | | | |
| Ambient temperature range | | | | | |
| Operating | (°C) | -20 ~ +70 | | | |
| Storage | (°C) | -40 ~ +85 | | | |
| Bearing type | | Sintered Bronze Sleeve | | | |
| Insulation resistance at 500vdc | (MΩ) | 100 | | | |
| Dielectric withstanding voltage | (vac) | 650 for 2 seconds | | | |
| Weight | (lbs / g) | 0.1938 / 88 | | | |
| Shaft load ratings, max at 1500 rpm | | | | | |
| Radial | (lbs / kg) | 0.562 / 0.255 | | | |
| Axial | (lbs / kg) | 0.169 / 0.076 | | | |
| Leadwires | | AWG 28, UL 3265 | | | |
| Temperature class, max | (°C) | B(130°C) | | | |
| RoHS | | Compliant | | | |

All motor data values at 25°C unless otherwise specified

* Energise at rated current, 2 phase on

