



42L048D

Technical Specifications

Part Number	Unipolar		Bipolar		
	42L048D1U	42L048D2U	42L048D1B	42L048D2B	
Rated voltage	(vdc)	5	12	5	12
Resistance per phase ± 10%	(ohms)	5.20	30.00	5.20	30.00
Inductance per phase, Typ	(mH)	2.10	11.30	4.10	22.30
Rated current per phase *	(amps)	0.96	0.40	0.96	0.40
Holding torque, min *	(oz-in / mNm)	15.1 / 106		18.5 / 131	
Step angle *	(degrees)	7.5 ± 0.5°			
Steps per revolution *		48			
Detent torque, max	(oz-in / mNm)	4.2 / 29.7			
Thermal resistance	(°C / watt)	N.A.			
Rotor moment of inertia	(oz-in-s ² / g-cm ²)	0.1066 / 19.5			
Ambient temperature range					
Operating	(°C)	-20 ~ +70			
Storage	(°C)	-40 ~ +85			
Bearing type		Sintered Bronze Sleeve			
Insulation resistence at 500vdc	(vac)	100 megohms			
Dielectric withstanding voltage	(lbs / g)	650 for 2 seconds			
Weight		.2563 / 116.4			
Shaft load ratings, max at 1500 rpm					
Radial	(lbs / kg)	1.124 / .509			
Axial	(lbs / kg)	.337 / .153			
Leadwires		AWG 26, UL 1430			
Temperature class, max		B(130°C)			
RoHS		Compliant			

All motor data values at 25°C unless otherwise specified

* Energise at rated current, 2 phase on

Stepper