



Technical Specifications

Part Number		Unipolar		Bipolar	
		20M020D1U	20M020D2U	20M020D1B	20M020D2B
Rated voltage	(vdc)	5	12	5	12
Resistance per phase ± 10%	(ohms)	20	115.2	20	115.2
Inductance per phase, Typ	(mH)	3.9	20.3	7.8	52.8
Rated current per phase *	(amps)	0.25	0.1	0.25	0.10
Holding torque, min *	(oz-in / mNm)	1.1 / 7.77		1.55 / 10.95	
Step angle, ± 1.5° *	(degrees)	18			
Steps per revolution *		20			
Detent torque, max	(oz-in / mNm)	0.50 / 3.53			
Thermal resistance	(°C / watt)	N.A.			
Rotor moment of inertia	(oz-in-s ² / g-cm ²)	2.24 x 10E-3 / 0.41			
Ambient temperature range					
Operating	(°C)	-20 ~ +70			
Storage	(°C)	-40 ~ +85			
Bearing type		Sintered Bronze Sleeve			
Insulation resistance at 500vdc		100 megohms			
Dielectric withstanding voltage	(vac)	450 for 2 seconds			
Weight	(lbs / g)	.052 / 23.5			
Shaft load ratings, max at 600 rpm					
Radial	(lbs / kg)	.112 / .051			
Axial	(lbs / kg)	.112 / .051			
Leadwires		AWG 28, UL 1429			
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