



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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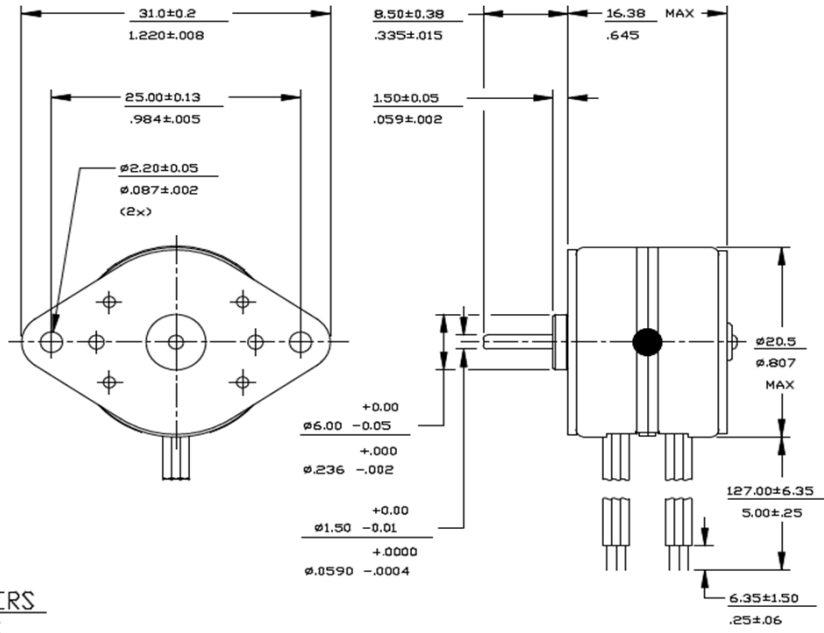


20M020D

RoHS Compliant

Ø20mm

1.55 mNm



DIMENSIONS: MILLIMETERS
INCHES

20M020D

Electrical Data	20M020D1U Unipolar	20M020D2U Unipolar	20M020D1B Bipolar	20M020D2B Bipolar	
1 Operating Voltage	5	12	5	12	VDC
2 Resistance per Phase, ± 10%	20.0	115.2	20.0	115.2	Ohms
3 Inductance per Phase, typ	3.9	20.3	7.8	52.8	mH
4 Rated Current per Phase *	0.25	0.10	0.25	0.10	A
Coil independent parameters					
5 Holding Torque, MIN *	7.77 (1.1)	7.77 (1.1)	10.95 (1.55)	10.95 (1.55)	mNm (oz-in)
6 Detent Torque, Max	3.53 (0.5)	3.53 (0.5)	3.53 (0.5)	3.53 (0.5)	mNm (oz-in)
7 Rotor inertia	0.41 (0.00224)	0.41 (0.00224)	0.41 (0.00224)	0.41 (0.00224)	(gcm ²) (oz-in-s ²)
8 Step Angle	18.0	18.0	18.0	18.0	Degree
9 Absolute accuracy 2 ph. On, Full step	± 1.5	± 1.5	± 1.5	± 1.5	Degree
10 Steps per Revolution	20	20	20	20	
11 Ambient Temp Range (operating)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	°C (°F)
12 Maximum Coil Temperature	130 (266)	130 (266)	130 (266)	130 (266)	°C (°F)
13 Bearing Type	Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	
14 Insulation Resistance at 500 VDC	100	100	100	100	Mohms
15 Dielectric Withstanding Voltage	450 for 2 seconds	450 for 2 seconds	450 for 2 seconds	450 for 2 seconds	VAC
16 Weight	23.5 (0.832)	23.5 (0.832)	23.5 (0.832)	23.5 (0.832)	g (oz)
17 Leadwire	AWG 28, UL 1429	AWG 28, UL 1429	AWG 28, UL 1429	AWG 28, UL 1429	

All Motor Data Values at 20°C Unless Otherwise Specified

* Energize at Rated Current, 2 Phase On

