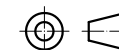
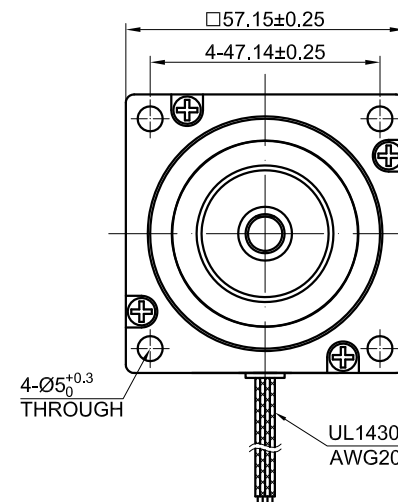
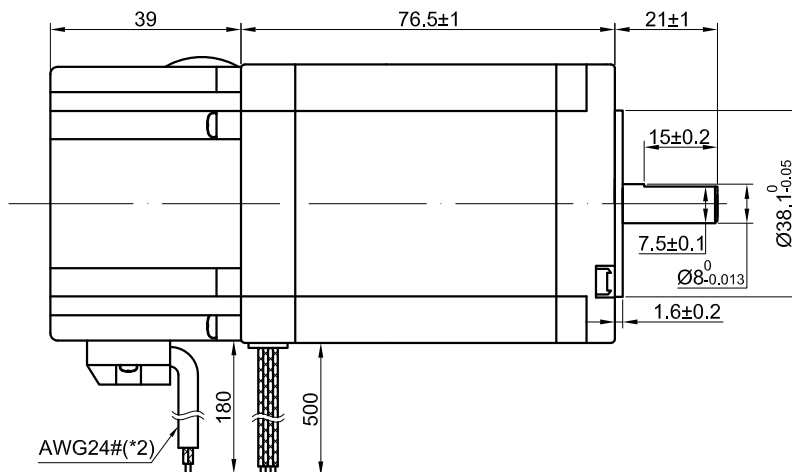


The top view of the circuit board is square with a central circular feature consisting of two concentric circles. The board is divided into four quadrants by a horizontal and a vertical centerline. In each corner, there is a circular component with a cross inside, and a smaller circular component with a cross inside. Additionally, there are four circular components with a cross inside, one in each quadrant. The board has a small rectangular feature at the bottom center.



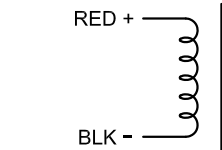
SPECIFICATION		CONNECTION		BIPOLAR	
AMPS/PHASE				5.00	
RESISTANCE/PHASE(Ohms)@20°C				0.40±10%	
INDUCTANCE/PHASE(mH)@1KHz				1.80±20%	
HOLDING TORQUE(Nm)[lb-in]				2.00 [17.71]	
STEP ANGLE(°)				1.8±0.09	
MAXIMUM RADIAL RUNOUT(mm)@LOAD 450g				0.025	
MAXIMUM AXIAL RUNOUT(mm)@LOAD 920g				0.075	
ROTOR INERTIA(g-cm²)				480	
WEIGHT(Kg)[lb]				—	
TEMPERATURE RISE:MAX.80°C (MOTOR STANDSTILL;FOR 2PHASE ENERGIZED)					
OPERATION AMBIENT TEMPERATURE 0°C~50°C[32°F~122°F]					
INSULATION RESISTANCE 100 Mohm (UNDER NORMAL TEMPERATURE AND HUMIDITY)					
INSULATION CLASS B 130°C[266°F]					
DIELECTRIC STRENGTH 500VAC FOR 1MIN.(BETWEEN THE MOTOR COILS AND THE MOTOR CASE)					
				1:1.5	
				SCALE	

TYPE OF CONNECTION (EXTERN)		MOTOR	
PIN NO	BIPOLAR	LEADS	WINDING
1	A —	BLK	A
2	A\ —	GRN	A\
3	B —	RED	B
4	B\ —	BLU	B\

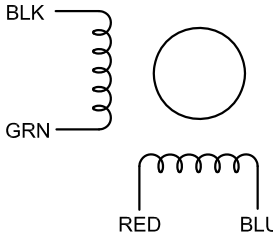
FULL STEP 2 PHASE-Ex. ,
WHEN FACING MOUNTING END (X)

STEP	A	B	A\	B\	CCW ↓	↑ CW
1	+	+	-	-		
2	-	+	+	-		
3	-	-	+	+		
4	+	-	-	+		

BRAKE CONNECTIONS
24V 2.0N.m



MOTOR CONNECTIONS



APVD		7.12.2019		STEPPER MOTOR	
CHKD					
1:1.5		DRN		23BK20-20	
SCALE		SIGNATURE			
		DATE			