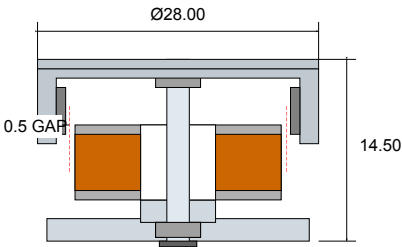
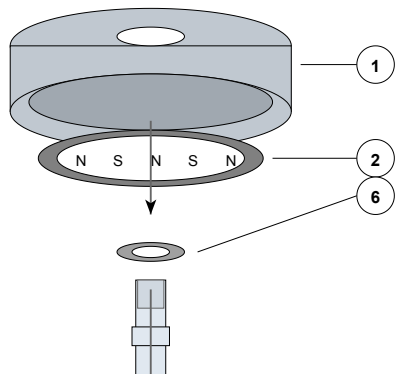


MF-2806.5-1400 BLDC MOTOR ASSEMBLY

EXPLODED VIEW

ASSEMBLED SECTION VIEW



MOTOR SPECIFICATIONS

Configuration: 32N14P Outrunner
Kv Rating: 1400 RPM/V
Max Voltage: 22.2V (6S)
Max Current: 25A (burst)
Weight: ~32g (without wires)

GENERAL TOLERANCES

Linear: $\pm 0.1\text{mm}$
Angular: $\pm 0.5^\circ$
Concentricity: 0.05mm TIR
Surface: 3.2 μm Ra (general)
Per ASME Y14.5-2018

ASSEMBLY NOTES:

1. BOND MAGNETS TO BELL ID WITH HIGH TEMP EPOXY (LOCTITE EA 9394)
2. ENSURE ALTERNATING N-S POLARITY OF MAGNETS
3. PRESS-FIT STATOR ONTO BASE PLATE BOSS (H7/g6 FIT)
4. INSTALL LOWER BEARING INTO BASE POCKET
5. INSERT SHAFT THROUGH STATOR AND LOWER BEARING
6. INSTALL UPPER BEARING ONTO SHAFT
7. SLIDE BELL ASSEMBLY OVER STATOR, ENGAGING UPPER BEARING
8. INSTALL C-CLIP TO RETAIN SHAFT
9. VERIFY FREE ROTATION - NO RUBBING OR BINDING
10. AIR GAP: 0.5mm NOMINAL (0.4-0.6mm ACCEPTABLE)
11. BALANCE ROTOR IF VIBRATION EXCEEDS 0.5mm/s
12. APPLY THREAD LOCKER TO PROP NUT (REMOVABLE GRADE)

BILL OF MATERIALS					
ITEM	PART NO.	DESCRIPTION	QTY	MATL	DWG
1	MF-2806-BELL	Rotor Bell	1	7075-T6	001
2	MF-2806-MAG	Arc Magnet, N52H	14	NdFeB	002
3	MF-2806-STAT	Stator Core (wound)	1	M19	003
4	MF-2806-BASE	Base Plate	1	7075-T6	004
5	MF-2806-SHFT	Shaft, M5 Thread	1	Ti 6Al-4V	005
6	MR85ZZ	Bearing, 5x8x2.5	2	52100	COTS
7	C-CLIP-5	C-Clip, 5mm	1	Spring	COTS

MODEL-F PROPULSION	
MOTOR ASSEMBLY, MF-2806.5-1400	
DWG NO: MF-2806-ASSY-A	SCALE: 4:1 / NTS
TYPE: OUTRUNNER BLDC	SHEET: 1 OF 1
Kv: 1400 RPM/V	WEIGHT: ~32g