

DC Torque Motor

MTM-54-13B

MTM-54-13B is a direct-drive DC torque motor. It is a permanent rare earth magnet, with continuous rotation and armature excited. The MTM-54-13B have usage where very high torque to power, volume and weight ratios are needed. These applications include missile and aircraft actuators, diagnostic medical instrumentation, ground and airborne radar antennas.



Specifications

Parameters	Units Values		
Peak Torque (Tp)	Nm	0.318	
No load speed (wNL)	rad/sec	260	
Total breakaway torque (TF)	Nm	12 X 10 ⁻³	
Ripple torque (TR)	%(avg.to pk.)	6	
Temperature rise	°C /Watts	7	
Max. allowable winding temperature	°C	150	
Moment of inertia (JM)	Grcm ²	220	
Weight	gr	108	
Damping factor at 25°C (FO)	Nm/rad/sec	1.2X 10 ⁻³	
Elect. Time constant at 25°C (TE)	Sec	2 X 10 ⁻⁴	

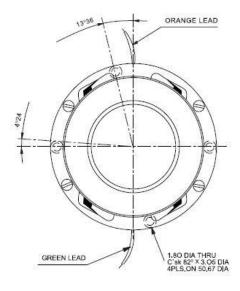
Parameter	Unit	Value	Tolerance
Resistance at 25°C (RM)	Ohm	9.9	±12.5%
Torque sensitivity (KT)	Nm/A	0.107	±10%
Back EMF constant (KB)	Volt/rad/sec	0.12	±10%
Inductance (LM)	mHy	1.8	±30%

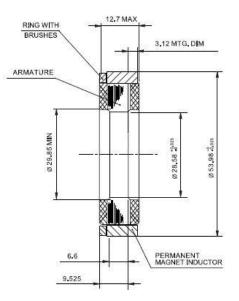
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MTM-54-13B

Drawing





All dimensions are in mm

For Additional Information

To learn more about the MTM-54-13B

or other MTC products, contact MTC on

+972 4 998 7772 or email marketing@mtcind.com

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