

Limited Angle Brushless Motors

TD-0805-A SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, T_P	1.25	oz-in
Motor Constant, K_M	0.3	oz-in/ \sqrt{W}
Excursion Angle	42	°
Number of Poles	2	
Weight	0.75	oz (nom)
Motor Inertia, J_M	1.00E-05	oz-in-s ²
Friction Torque, T_F	0.045	oz-in
Electrical Time Constant, τ_E	0.293	ms
Mechanical Time Constant, τ_M	15.80	ms
Winding Constants	Value	Units
Torque Sensitivity, K_T	1.02	oz-in/amp
Back EMF, K_E	0.0072	V per rad/s
Terminal Resistance, R_M	11.6	ohms (nom)
Terminal Inductance, L_M	3.4	mH (nom)
Voltage, Stalled at Peak Torque, V_P	16	volts
Amps at Peak Torque, I_P	1.37	amps

TD-0805-A Typical Outline Drawing

