

Brushless Torque Motors

DB-1250-A-1 SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, T_P	1.4	oz-in
Motor Constant, K_M	1.11	oz-in/ \sqrt{W}
Number of Poles	8	
Number of Phases	3" Δ "	
Weight	1	oz (nom)
Motor Inertia, J_M	1.22E-04	oz-in-s ²
Friction Torque, T_F	0.35	oz-in
Electrical Time Constant, τ_E	0.09	ms
Mechanical Time Constant, τ_M	14.10	ms
Temperature Rise, Housed TPR'	29.6	°C/W
Integral Feedback Device	None	
Winding Constants	Value	Units
Torque Sensitivity, K_T	7	oz-in/amp
Back EMF, K_E	0.049	V per rad/s
Terminal Resistance, R_M	40	ohms (nom)
Terminal Inductance, L_M	3.7	mH (nom)
Voltage, Stalled at Peak Torque, V_P	8	volts
Amps at Peak Torque, I_P	0.20	amps

DB-1250-A-1 Typical Outline Drawing

