

**Motor Assembly Data for: DC040A-2 ( 2.07 V/krpm)**

Voltage Constant	$K_E$	0.0198	V/rad/s
		2.07	V/krpm
Torque Constant	$K_T$	0.0198	Nm/A
		2.8	oz-in/A
Rated Voltage	$V_r$	12	VDC
Rated Torque <sup>1,3</sup>	$T_r$	1.5	Nm
		212.8	oz-in
Rated Speed <sup>1,3</sup>	$\omega_r$	32	rpm
Rated Current <sup>1,3</sup>	$I_r$	1.30	A
Rated Power <sup>1,3</sup>	$P_r$	5	W
No-Load Speed <sup>2</sup>	$\omega_{nl}$	42	rpm
No-Load Current <sup>2</sup>	$I_{nl}$	0.29	A
Resistance (L-L)	$R_{mt}$	2.17	Ohms
Inductance (L-L)	$L$	1.54	mH
Rotor Inertia	$J_r$	0.0000028	kg-m <sup>2</sup>
		0.00039	oz-in-sec <sup>2</sup>
Max Winding Temp	$\theta_{max}$	155	°C
Hall Sensor Spacing		TBD (60 or 120)	°Elec
Poles		2	
Winding Configuration		N/A	
Direction of Rotation		Elec. Rev.	lead end
Weight	$w_m$	440	g
		16	oz

<sup>1</sup> Recorded at maximum winding temperature at 25 deg C ambient and without heat sink.

<sup>2</sup> Recorded at Rated Voltage.

<sup>3</sup> Based on thermal limitations of motor only. See Maximum Speed and Gearbox Rated Torque if applicable for possible additional limitations.

**Gearbox Data for: G51A (127.8:1)**

Rated Torque	1.2	Nm
	175	oz-in
Gear Ratio	127.8	
Efficiency	0.66	

**Encoder Data for: None**

Rated Voltage	N/A	VDC
Resolution	N/A	CPR
Output Channels	N/A	
Output Type	N/A	

**Brake Data for: None**

Rated Voltage	N/A	VDC
Rated Torque	N/A	Nm
	N/A	oz-in



**MOTOR ELECTRICAL AND PERFORMANCE OUTLINE**

**GM9213C494-R1**