ENTER DRIVE LETTER BELOW(S for Sine, T for Trap)

s

ENTER UNIT LETTER BELOW(M for SI, E for English)

m

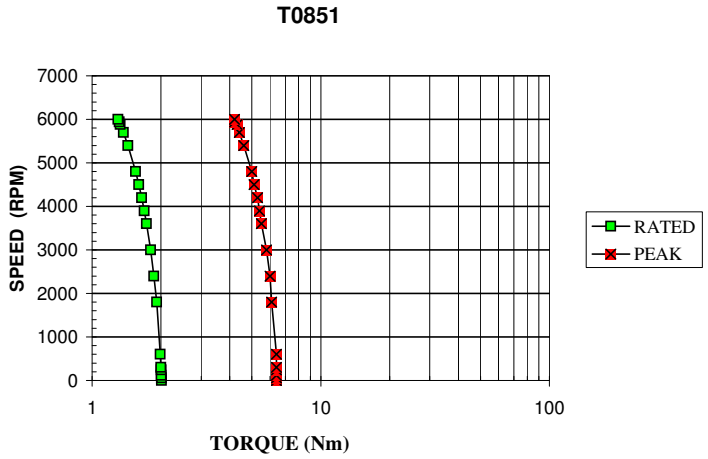
SELECT WINDING FROM DROP DOWN LIST

Ke = C0(Ke = 40 Vpk/krpm)

MODE NUMBER

CHECKED: SD	T0851 C0(Ke = 40 Vpk/krpm)	DRAWN:	AR
all values at 25 deg c unless stated otherwise	STD	CUST	APPROVED:
TORQUE & CURRENT AT 40 Deg C AMBIENT	YES		SD

Symbol		Units	NOM	MIN	MAX
		^SPECIFICATIONS			
Tpk	Torque,peak stall	Nm			6.4
Tc	Torque,continuous stall	Nm	2.01	1.81	2.21
Ktp	Torque sensitivity (L TO L)	Nm/Apeak	0.331	0.298	0.364
Kt	Torque sensitivity (L TO L)	Nm/Arms	0.468	0.421	0.515
Ra	Armature resistance (L TO L)	ohms	1.45	1.23	1.67
La	Armature inductance (L TO L)	millihenry	7.6	5.32	9.88
Ip	Amps at Tpk	Apeak	19.5	17.6	21.5
Isp	Amps at Tc stall	Apeak	7.16	6.44	7.88
Is	Amps at Tc stall	Arms	5.06	4.55	5.57
Kep	Back EMF constant	Vpeak/Krpm	**40.00**	36.00	44.00
Ke	Back EMF constant	Vrms/Krpm	28.29	25.46	31.12
Kep	Back EMF constant	Vpeak/rad/sec	0.382	0.298	0.364
Ke	Back EMF constant	Vrms/rad/sec	0.270	0.243	0.297
Ep	Volts @ Tpk	Vpeak	28.28		
Fi	Viscous friction	Nm/Krpm	0.009		
Tf	Static friction torque	Nm	0.019		
Ec	volts @ Tc	Vpeak	15.573		
Jm	Moment of inertia	Kg-cm2	0.7345		
Tm	Time constant,mech	milliseconds	0.73		
Te	Time constant,elect	milliseconds	5.24		
Rth	Thermal resistance	deg C/watt	1.35		
Tth	Time constant,thermal	minutes	20		
Oa	Max armature temp	deg C			155
Km	Figure of Merit	Nm/(amp-ohm)	0.27		
Nls	Max operating speed	rpmmax			6000
	# of motor pole		8		
Wt	weight	Kg	2.8		



MOTOR IS MOUNTED ON A 254 mmx254 mmx6.35 mm ALUMINUM PLATE IN A 40 DEG.C AMBIENT

SPEED/ TORQUE CURVE SHOWN IS RATED. TYPICAL VALUES ARE WITH IN +/- 10% OF RATING

OTHER SPECIFICATIONS

SINUSOIDAL DRIVE

REV(Dt)	Description
A(11/11/05)	Initial release
B(2/8/06)	Add RMS Kt and Ke
C(3/20/06)	Add # of poles and reconfigured speed/torque
D(4/6/06)	Sine SI Ke values corrected

RPM	Trated Nm	Peak Voltage	Peak Current	RMS Current	Watts
0	2.012	15.6	7.16	5.06	84
300	2.001	27.5	7.12	5.03	156
600	1.988	39.4	7.07	5.00	229
1200	1.956	63.1	6.96	4.92	368
1800	1.915	86.8	6.81	4.82	501
2400	1.864	110.4	6.63	4.69	623
3000	1.803	133.9	6.41	4.53	733
3600	1.732	157.4	6.16	4.36	831
4200	1.648	180.7	5.86	4.14	908
4800	1.550	204.0	5.51	3.90	967
5400	1.435	227.1	5.10	3.61	998
6000	1.300	250.0	4.62	3.27	996

Rated Speed	Rated Torque
6000	1.3
Rated watts	818