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 = D0(Ke = 50 Vpk/krpm)

MODEL NUMBER T1101 D0(Ke = 50 Vpk/krpm)

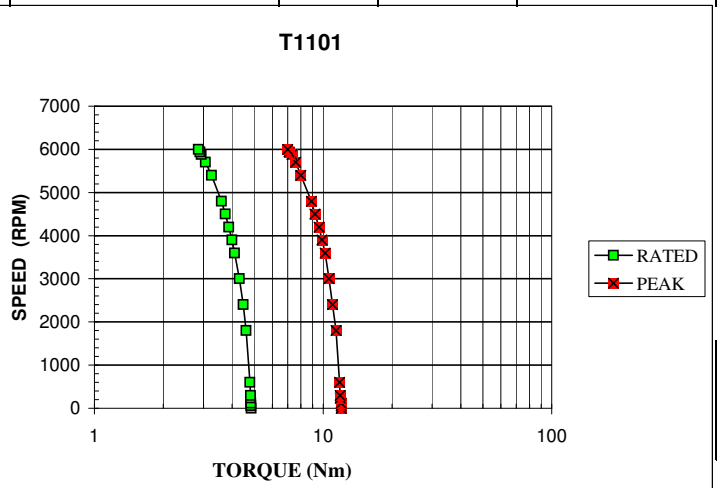
CHECKED: SD | DRAWN: AR | STD: YES | CUST: | APPROVED: SD

all values at 25 deg c unless stated otherwise

TORQUE & CURRENT AT 40 Deg C AMBIENT

^SPECIFICATIONS

Symbol		Units	NOM	MIN	MAX
Tpk	Torque,peak stall	Nm			12.0
Tc	Torque,continuous stall	Nm	4.85	4.37	5.34
Ktp	Torque sensitivity (L TO L)	Nm/Apeak	0.413	0.372	0.454
Kt	Torque sensitivity (L TO L)	Nm/Arms	0.585	0.527	0.644
Ra	Armature resistance (L TO L)	ohms	1.04	0.88	1.20
La	Armature inductance (L TO L)	millihenry	5	3.50	6.50
Ip	Amps at Tpk	Apeak	29.0	26.1	31.9
Isp	Amps at Tc stall	Apeak	13.79	12.41	15.17
Is	Amps at Tc stall	Arms	9.75	8.78	10.73
Kep	Back EMF constant	Vpeak/Krpm	**50.00**	45.00	55.00
Ke	Back EMF constant	Vrms/Krpm	**35.36**	31.82	38.90
Kep	Back EMF constant	Vpeak/rad/sec	0.478	0.372	0.454
Ke	Back EMF constant	Vrms/rad/sec	0.338	0.304	0.372
Ep	Volts @ Tpk	Vpeak	30.16		
Fi	Viscous friction	Nm/Krpm	0.031		
Tf	Static friction torque	Nm	0.034		
Ec	volts @ Tc	Vpeak	21.512		
Jm	Moment of inertia	Kg-cm2	2.37288		
Tm	Time constant,mech	milliseconds	1.08		
Te	Time constant,elect	milliseconds	4.81		
Rth	Thermal resistance	deg C/watt	0.51		
Tth	Time constant,thermal	minutes	25		
Oa	Max armature temp	deg C			155
Km	Figure of Merit	Nm/(amp-ohm)	0.406		
Nls	Max operating speed	rpmmax			6000
	# of motor poles		8		
Wt	weight	Kg	4.9		



MOTOR IS MOUNTED ON A 304.8 mmx304.8 mmx12.7 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

RPM	Trated Nm	Peak Voltage	Peak Current	RMS Current	Watts
0	4.845	21.5	13.79	9.75	222
300	4.821	36.4	13.72	9.70	398
600	4.791	51.3	13.63	9.64	572
1200	4.711	80.9	13.41	9.48	907
1800	4.605	110.4	13.10	9.26	1221
2400	4.471	139.8	12.72	8.99	1510
3000	4.306	169.1	12.25	8.66	1766
3600	4.108	198.2	11.69	8.27	1983
4200	3.871	227.2	11.02	7.79	2146
4800	3.590	255.9	10.22	7.23	2247
5400	3.255	284.4	9.26	6.55	2266
6000	2.847	312.6	8.10	5.73	2182

Rated Speed	Rated Torque
5400	3.3
Rated watts	1844

REV(Dt)	Description
A(11/11/05)	Initial Release
B(2/10/06)	Add RMS Kt and Ke
C(3/20/06)	Add # of poles
D(4/6/06)	Sine SI Ke values corrected
E(2/20/07)	Add C6 and D3 winding
F(5/07/07)	Reconfigured speed/torque