



Micro-step Calculation Table of VID Driving Signal

Introduce Peak current (For calculation)		15.30
PULSE #	VALUE OF CURRENT [mA]	
P M	$I = I_{max}$	15.30
P 1	$I = 0.967 * I_{max}$	14.80
P 2	$I = I_{max} * 0.866$	13.25
P 3	$I = I_{max} * (0.764 - 0.0083 * I_{max})$	9.75
P 4	$I = I_{max} * (0.0012 * I_{max} * I_{max} - 0.052 * I_{max} + 0.88)$	5.59
P 5	$I = I_{max} * (0.0015 * I_{max} * I_{max} - 0.05 * I_{max} + 0.6)$	2.85

ATTENTION:

Maximum peak current= 16.1 mA

Minimum peak current= 12.8 mA

Best advised peak current= 15.3 mA

Coil Resistance : 280 +/- 20 Ohms

Micro-STEP #	ROTOR Angle	Pointer Angle	Designation by PULSE #		Current in Coils [mA]		Voltage on Coil [V]	
					Coil 1	Coil 2	Coil 1	Coil 2
0	-90	0.50	- P 4	P4	-5.59	5.59	-1.56	1.56
1	-75	0.42	- P 5	P 3	-2.85	9.75	-0.80	2.73
2	-60	0.33	0	P 2	0.00	13.25	0.00	3.71
3	-45	0.25	P 5	P 1	2.85	14.80	0.80	4.14
4	-30	0.17	P 4	P M	5.59	15.30	1.56	4.28
5	-15	0.08	P 3	P 1	9.75	14.80	2.73	4.14
6	0	0.00	P 2	P 2	13.25	13.25	3.71	3.71
7	15	-0.08	P 1	P 3	14.80	9.75	4.14	2.73
8	30	-0.17	P M	P 4	15.30	5.59	4.28	1.56
9	45	-0.25	P 1	P 5	14.80	2.85	4.14	0.80
10	60	-0.33	P 2	0	13.25	0.00	3.71	0.00
11	75	-0.42	P 3	- P 5	9.75	-2.85	2.73	-0.80
12	90	-0.50	P 4	- P 4	5.59	-5.59	1.56	-1.56