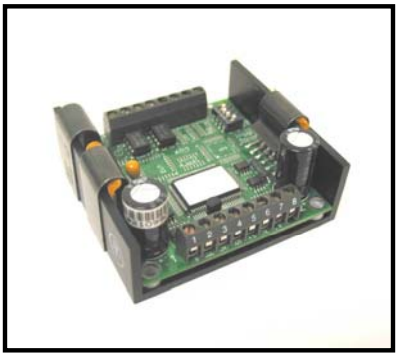
MSD 25C Microstepping Driver

- Compact size using ASIC and SMT Technology
- 12 - 48 Vdc Rated Supply Input
- 0.4 - 3 Arms Rated Phase Current, Up to 4 Amps Peak
- Optically Isolated STEP, DIRECTION, ENABLE, and RESET inputs
- Up to 10 MHz STEP Frequency Input
- Microstep resolutions up to 51,200 s/rev with 1.8 Degree Motors
- Full STEP and FAULT Outputs
- Single and Double Shaft (Encoder Ready) Motor Configurations



Drive Performance

Catalog Number	Voltage Range Vdc	Current Rating RMS Ic	Current Rating Peak Ip	Switch Freq kHz	Steps per revolution (1.8 Degree Two Phase Motor)	Weight Kg	Weight Lb
MSD 25C	+12 to 48	0.40 to 3	0.57 to 4	20	400, 800, 1k, 1600, 2k, 3200, 5k, 6400, 10k, 12800, 25k, 25600, 50k, 51200	0.113	0.25

Holding Torque 2 Phases On Th - Minimum Ncm	Holding Torque 2 Phases On Th - Minimum oz-in	Current Rated / ph Iph Amps DC	Phase Connection Types	Motor Inertia Jm g-cm²	Motor Inertia Jm oz-in-s²	Motor Diameter mm	Motor Diameter inch	Motor Length Lm mm	Motor Length Lm inch	Motor Weight W kg	Motor Weight W lb	Motor Catalog Number Shaft Configuration Double	Motor Catalog Number Shaft Configuration Single	Drive Catalog Number
14 20	20 29	0.4 0.3	Parallel Series	18	0.00025	42	1.66	34	1.34	0.2	0.44	IS 17 001	IS 17 012	MSD 25C
17	24	1.5	4 lead	18	0.00025	42	1.66	34	1.34	0.2	0.44	IS 17 007	IS 17 003	MSD 25C
24 34	34 48	0.8 0.6	Parallel Series	55	0.00078	42	1.66	39	1.54	0.3	0.57	IS 17 009	IS 17 016	MSD 25C
31	44	1.0	4 lead	32	0.00045	42	1.66	43	1.69	0.3	0.66	IS 17 005	IS 17 018	MSD 25C
55 55	78 78	1.1 0.6	Parallel Series	68	0.00096	42	1.66	47	1.85	0.3	0.73	IS 17 011	IS 17 020	MSD 25C
54 54	76 76	1.4 0.7	Parallel Series	77	0.00109	56	2.20	41	1.61	0.5	1.10	IH 23 008	IH 23 001	MSD 25C
54	76	2.2	4 lead	77	0.00109	56	2.20	41	1.61	0.5	1.10	IH 23 009	IH 23 002	MSD 25C
111 111	157 157	1.4 0.7	Parallel Series	220	0.00312	56	2.20	55	2.17	0.7	1.54	IH 23 010	IH 23 003	MSD 25C
111	157	2.1	Series	220	0.00312	56	2.20	55	2.17	0.7	1.54	IH 23 012	IH 23005	MSD 25C
182	258	2.1	4 lead	340	0.00482	56	2.20	77	3.03	1.0	2.20	IH 23 013	IH 23006	MSD 25C
182	258	2.1	Series	340	0.00482	56	2.20	77	3.03	1.0	2.20	IH 23 014	IH 23 007	MSD 25C
319 319	452 452	2.0 1.0	Parallel Series	660	0.00935	86	3.39	67	2.64	1.7	3.75	IH 34 108	IH 34 101	MSD 25C
319	452	2.0	Series	660	0.00935	86	3.39	67	2.64	1.7	3.75	IH 34 109	IH 34 102	MSD 25C
319	452	3.0	Series	660	0.00935	86	3.39	67	2.64	1.7	3.75	IH 34 110	IH 34 103	MSD 25C
538	762	2.0	Series	1200	0.01699	86	3.39	94	3.70	2.5	5.51	IH 34 111	IH 34 104	MSD 25C
538	762	3.0	Series	1200	0.01699	86	3.39	94	3.70	2.5	5.51	IH 34 112	IH 34 105	MSD 25C
920	1303	2.5	Series	1800	0.02549	86	3.39	126	4.94	3.8	8.27	IH 34 113	IH 34 106	MSD 25C

Notes: Visit www.mcg-net.com for more individual CAD drawings & data

The MSD 25C is an economical and compact size microstepping driver for use with MCG Step Motors. These Drives require single an unregulated DC power supply. These Models interface with typical Indexers.

Protection / Diagnostics

- Thermal
- Phase to ground
- Phase to Phase
- Voltage to Phase
- Fault Output

Adjustments

- 14 microstep resolutions, dip switch selectable both in decimal and binary
- Microstep resolutions can be changed "on the Fly' without requiring driver reset
- Adjustable output current (per phase) via an external resistor
- Adjustable Idle Current Reduction via an external resistor. Automatically reduces idle currents at dwell

General Features

- No minimum motor inductance required
- Automatically switches between Slow and Fast decy for unmatched performance
- Power and Signal Screw terminal connectors.