

Power ICs.....

DC-DC Converter Power ICs

Outline

The MD Series is a non-isolated, PWM control stepdown DC-DC converter power IC whose MOSFET and drive circuit IC chip integration eliminates the complexity of power supply circuit design. Two rectification systems are available: flywheel Schottky diode type and highly efficient synchronous rectification MOSFET type. A high-performance power supply can be easily realized by choosing a suitable MD chip. The MD Series is available in SMD type HSOP28, SSOP32, LSSOP26, and SOP8 packages.

Features

1. High-efficiency

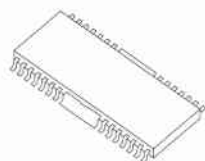
The MD Series consists of a matched control IC and main switching MOSFET in a single package, which allows the construction of a highly efficient power supply with little switching loss and wiring loss.

2. Switching Frequency

Choose the switching frequency matched to the usage conditions from among 250kHz fixed type, 100kHz/300kHz switched type, and 100kHz to 500kHz adjustable type.

3. Protection Functions

The MD Series has overcurrent protection, thermal shutdown, undervoltage lockout (UVLO) and etc.



HSOP28



SSOP32



LSSOP26



SOP8

Type No.	Input Voltage [V]	Output Voltage [V]	Output Current [A]	Frequency [kHz]	Operation Temp [°C]	Rectification System	Outline	
							Package	Fig.
☆MD5001T	4.5 to 14	0.8 to 12 *2	0 to 1	100 to 500 *4	-40 to 85	Fly wheel SBD	SOP8	90
MD3221N	4.5 to 20	2.5/3.3 *1 0.8 to 14 *2	0 to 3	100/300 *3	-30 to 85	Synchronous	SSOP32	83
☆MD3221R		0.8 to 14 *2					LSSOP26	84
MD3222N	8 to 20	2.5/3.3 *1 0.8 to 14 *2	0 to 6	250	-10 to 80	Fly wheel SBD	SSOP32	83
MD1222N		2.5 to 12 *2	0 to 5				HSOP28	81
MD1320F	12 to 30	3.3/5 *1	0 to 3	250	-30 to 85	Synchronous	SSOP32	83
MD1322F		2.5 to 12 *2	0 to 1.5					
MD1320N	8 to 30	3.3/5 *1	0 to 1.8	100 to 500 *4	-30 to 85	Fly wheel SBD	SSOP32	83
MD1322N		2.5 to 12 *2	0 to 5					
☆MD1323R	8 to 40	0.8 to 12 *2	0 to 3	100 to 500 *4	-30 to 85	Synchronous	SSOP32	83
☆MD1324R		2.5 to 12 *2						
☆MD1333N	8 to 40	2.5 to 12 *2	0 to 3	100 to 500 *4	-30 to 85	Synchronous	SSOP32	83
MD1421N		3.3/5 *1						
MD1422N	8 to 40	2.5 to 12 *2	0 to 3	100 to 500 *4	-30 to 85	Synchronous	SSOP32	83
MD1423N		2.5 to 12 *2						
☆MD1423R	8 to 40	2.5 to 12 *2	0 to 3	100 to 500 *4	-30 to 85	Synchronous	SSOP32	83
☆MD1424R		0.8 to 12 *2						
MD1620F	12 to 57	5	0 to 2	250	-10 to 80	Fly wheel SBD	HSOP28	81
MD1622N	8 to 57	2.5 to 12 *2	0 to 1.2	250	-30 to 85	Fly wheel SBD	SSOP32	83

☆: New product

* 1: Selectable output voltage 3.3V/5V

* 2: Adjustable output voltage

* 3: Selectable 100k/300kHz

* 4: Adjustable from 100k to 500kHz