



COIL TECHNOLOGY CORPORATION

1W & 2W 4Pin SIP DC/DC CONVERTERS

Features

4 Pin SIP Package
Single output
Unregulated
-40 to +85 operating temp
CE EN60950-1 certified

Series	Description	Page
MSM	1W 1kV Isolation, 2kV option Vin; 3.3,5,12,15 & 24 Vout; 1.8, 3.3, 5, 9, 12, 15 & 24	2
MSL	2W 1kV Isolation Vin; 3.3,5,12,15 & 24 Vout; 1.8, 3.3, 5, 9, 12, 15 & 24	3
M	1W 3kV Isolation Vin; 5, 12 & 15 Vout; 5, 9, 12, 15	4

ELECTRICAL SPECIFICATIONS: UNREGULATED

- Input voltage range ----- $\pm 10\%$
- Input filter----- Capacitor.
- Output voltage accuracy ----- $\pm 5\%$
- Line voltage regulation -----
- 3.3V,5V Output Types----- 1.3%Typ./1%Of Vin
- 9V,12V and 15V Output Types----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-
- 3.3V,5V Output Types----- 20%Max.
- 9V,12V,15V,24V Output Types----- 10%Max.
- Ripple&noise/20MHZ BW ----- 100mV P-P Max.
- Efficiency at full load----- 80% typ.
- Isolation voltage ----- 1000Vdc/1sec.
- Short circuit protection ----- 1.0 Second
- Operating temperature range ----- -40°C to 85°C
- Storage temperature range ----- -55°C to 125°C
- Isolation resistance ----- 10G Ω Min.
- Isolation capacity ----- 80pF Typ.
- Package weight----- 1.4g



■ Meet CE EN-60950-1 Certified

*Note: Measured @ 25°C With The Condition of

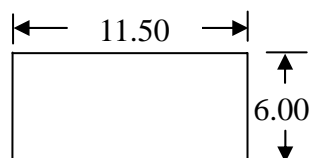
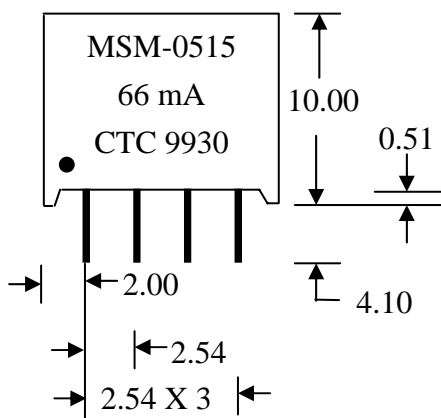
*Note:Add H after P/N for isolation 2000Vdc.

Vin = Nominal And Full Load.

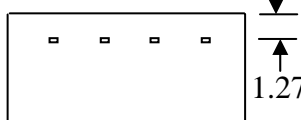
Selection Guide

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
MSM-XX1.8	3.3,5,9,12,15,24	1.8	555	70
MSM-XX3.3	3.3,5,9,12,15,24	3.3	300	75
MSM-XX05	3.3,5,9,12,15,24	5	200	70~78
MSM-XX09	3.3,5,9,12,15,24	9	111	70~78
MSM-XX12	3.3,5,9,12,15,24	12	84	78~82
MSM-XX15	3.3,5,9,12,15,24	15	66	78~84
MSM-XX24	3.3,5,9,12,15,24	24	42	78~85

Package Style And Pinning (mm)



TOP VIEW



BOTTOM VIEW

PIN	FUNCTION
1	-VIN
2	+VIN
3	-VOUT
4	+VOUT

TOL. : $\pm 0.25\text{mm}$ UNIT : mm

Note : Terminal ----- 0.51 X 0.25 Flat Pin

ELECTRICAL SPECIFICATIONS: UNREGULATED

- Input voltage range ----- $\pm 10\%$
- Input filter----- Capacitor.
- Output voltage accuracy ----- $\pm 5\%$
- Line voltage regulation ----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-
5V Output Types----- 15% Max.
9V,12V and 15V Output Types----- 10% Max.
- Ripple&noise/20MHZ BW ----- 200mV P-P Max.
- Efficiency at full load----- 70% Min.
- Isolation voltage ----- 1000 Vdc/1sec.
- Short circuit protection ----- 1.0 Second
- Operating temperature range ----- -40°C to 85°C
- Storage temperature range ----- -55°C to 125°C
- Isolation resistance ----- 10G Ω
- Isolation capacity ----- 46pF Typ.
- Package weight----- 1.4g
- Meet CE EN-60950-1 Certified

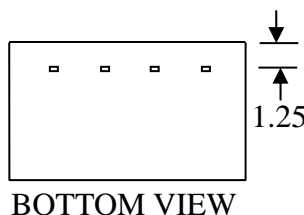
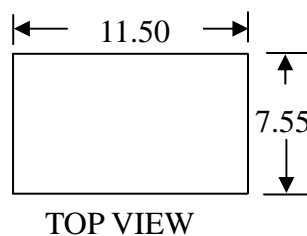
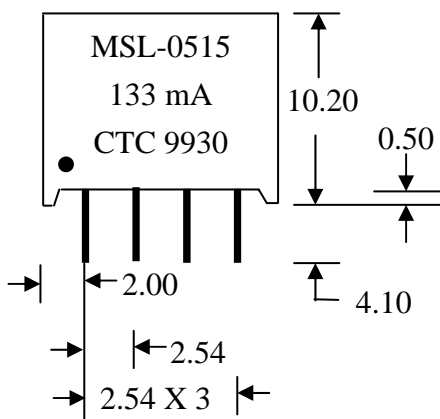


Note: Measured @ 25°C With The Condition of Vin = Nominal And Full Load.

Selection Guide

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
MSL-XX3.3	3.3,5,9,12,15,24	3.3	606	70
MSL-XX05	3.3,5,9,12,15,24	5	400	70
MSL-XX09	3.3,5,9,12,15,24	9	222	72
MSL-XX12	3.3,5,9,12,15,24	12	166	75
MSL-XX15	3.3,5,9,12,15,24	15	133	78
MSL-XX24	3.3,5,9,12,15,24	24	83	80

Package Style And Pinning (mm)



PIN	FUNCTION
1	-VIN
2	+VIN
3	-VOUT
4	+VOUT

*Note : Terminal ----- 0.51 X 0.2 Flat Pin

TOL. : $\pm 0.25\text{mm}$
UNIT : mm

ELECTRICAL SPECIFICATIONS: UNREGULATED

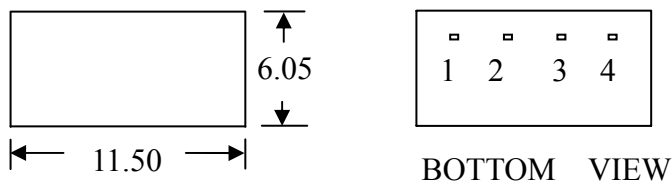
- Input voltage range ----- $\pm 10\%$
- Output voltage accuracy ----- $\pm 5\%$
- Rate power----- 1W
- Isolation voltage----- 3KVdc
- Line voltage regulation ----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-
 5V Output Types----- 15% Max.
 9V,12V and 15V Output Types----- 10% Max.
- Ripple&noise/20MHZ BW ----- 100mV P-P Max.
- Efficiency at full load----- 70% Min,80%typ.
- Switching Frequency----- 50KHz Min.
- Short circuit protection ----- 1.0 Second
- Operating temperature range ----- -40°C to 85°C
- Storage temperature range ----- -55°C to 125°C
- Isolation resistance ----- 15G Ω Min.
- Isolation capacity ----- 70pF Typ.
- Package weight----- 1.0g
- Meet CE EN-60950-1 Certified



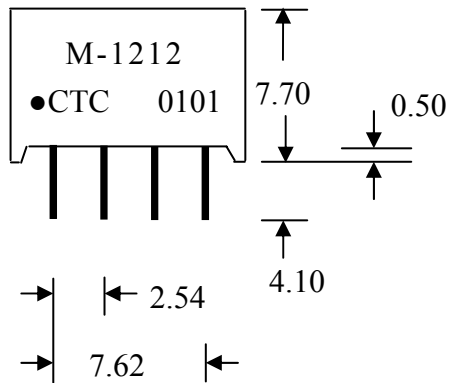
Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
M-0505	5	5	200	69
M-0509	5	9	111	72
M-0512	5	12	83	74
M-0515	5	15	66	78
M-1205	12	5	200	69
M-1209	12	9	111	74
M-1212	12	12	83	76
M-1215	12	15	66	78
M-1505	15	5	200	70
M-1509	15	9	111	74
M-1512	15	12	83	76
M-1515	15	15	66	78

Package Style And Pinning (mm)



PIN	FUNCTION
1	-VIN
2	+VIN
3	-VOUT
4	+VOUT



TOL. : ± 0.25 mm
 UNIT : mm