

MMT

A decorative graphic consisting of several overlapping, wavy, translucent blue lines that flow across the top of the page.

DC/DC CONVERTER

A decorative graphic featuring a cluster of vibrant green leaves with water droplets on the left side, and several flowing, ribbon-like green shapes that sweep across the bottom and right side of the page.

5-6 Watt

2019

<http://www.mmtmachrone.com>

FEATURES :

- 2:1Wide Input Voltage
- 5-6 Watt 24PIN DIL Package
- Efficiency To 80%
- 1500Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C TO +85°C



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage Vdc	Output Voltage Vdc	Output Current mA	Input Current		Efficiency %TYP
				No Load mA	Full Load mA	
68D5-12S03CN	9-18	3.3	1000	7.5	405	70
68D5-12S05CN	9-18	5	1000	7.5	545	75
68D5-12S12CN	9-18	12	470	7.5	585	80
68D5-12S15CN	9-18	15	400	7.5	625	80
68D5-12D05CN	9-18	±5	±500	12	545	75
68D5-12D12CN	9-18	±12	±230	12	575	80
68D5-12D15CN	9-18	±15	±190	12	590	80
68D5-24S03CN	18-36	3.3	1000	5	195	70
68D5-24S05CN	18-36	5	1000	5	265	78
68D5-24S12CN	18-36	12	470	5	285	80
68D5-24S15CN	18-36	15	400	5	305	80
68D5-24D05CN	18-36	±5	±500	7.5	265	80
68D5-24D12CN	18-36	±12	±230	7.5	285	80
68D5-24D15CN	18-36	±15	±190	7.5	295	80
68D5-48S03CN	36-72	3.3	1000	2	98	70
68D5-48S05CN	36-72	5	1000	2	133	80
68D5-48S12CN	36-72	12	470	2	145	80
68D5-48S15CN	36-72	15	400	2	154	80
68D5-48D05CN	36-72	±5	±500	3	265	80
68D5-48D12CN	36-72	±12	±230	3	142	80

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter	Capacitor				

DC-DC Converter

68D5 SERIES

5-6Watt 1.5KV Isolated

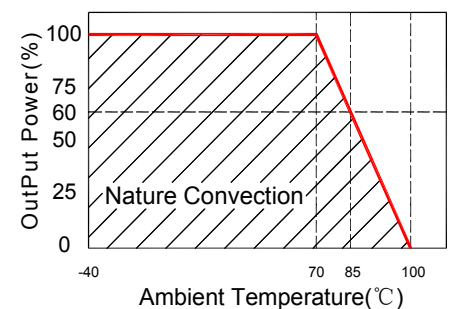
2 : 1 Input Voltage Range

Single & Dual Output

1.25" x 0.8"



Temperature Derating Graph



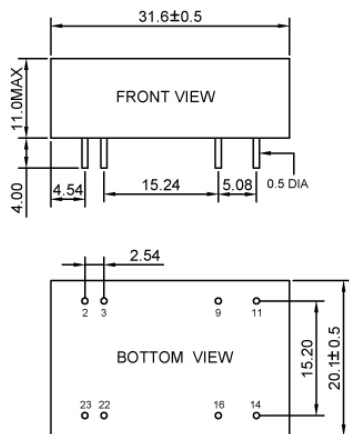
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous				
Line Regulation				±0.5	%
Load Regulation	Single (F.L To 10% Load)			±0.5	%
Load Regulation	Dual (F.L To 1/4 Load)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

General Specifications

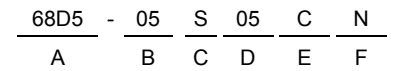
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			200		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated Copper With Non-Conductive Base				
Weight			16.2		g
Dimensions		31.60x20.10x11.0			mm

Markings and dimensions



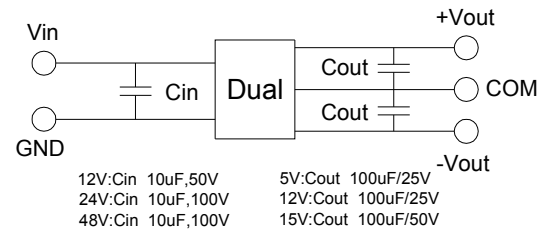
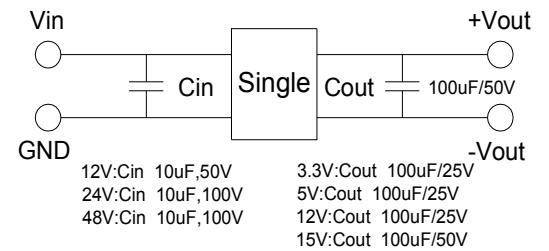
UNIT : mm Unless otherwise specified, all tolerances are ±0.25

Part Number

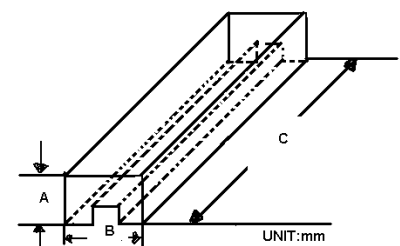


- A : Series
- B : Input Voltage
- C : Single(S);Dual(D)
- D : Output Voltage
- E : Types(C)
- F : Package

Recommended Test Circuit



Packaging



SIZE(mm)		
A	B	C
18.71	23.00	522

PIN Connection

Pin	2.3	9	11	14	16	22.23
Single	-Vin	No Pin	NC	+Vout	-Vout	+Vin
Dual	-Vin	Com	-Vout	+Vout	Com	+Vin

FEATURES :

- 4:1Wide Input Voltage
- 5-6 Watt 24PIN DIL Package
- Efficiency To 80%
- 1500Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C TO +85°C

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage	Output Voltage	Output Current	Input Current		Efficiency
				No Load	Full Load	
				Vdc	Vdc	
68DW5-24S03RNNL	9-36	3.3	1000	7.5	195	70
68DW5-24S05RNNL	9-36	5	1000	7.5	265	80
68DW5-24S12RNNL	9-36	12	470	7.5	285	80
68DW5-24S15RNNL	9-36	15	400	7.5	305	80
68DW5-24D05RNNL	9-36	±5	±500	12	265	80
68DW5-24D12RNNL	9-36	±12	±230	12	285	80
68DW5-24D15RNNL	9-36	±15	±190	12	295	80
68DW5-48S03RNNL	18-72	3.3	1000	5	98	70
68DW5-48S05RNNL	18-72	5	1000	5	133	75
68DW5-48S12RNNL	18-72	12	470	5	145	80
68DW5-48S15RNNL	18-72	15	400	5	154	80
68DW5-48D05RNNL	18-72	±5	±500	7.5	265	75
68DW5-48D12RNNL	18-72	±12	±230	7.5	142	80
68DW5-48D15RNNL	18-72	±15	±200	7.5	156	80

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Filter	Capacitor				

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous				
Line Regulation				±0.5	%
Load Regulation	Single (F.L To 10% Load)			±0.5	%
Load Regulation	Dual (F.L To 1/4 Load)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us



DC-DC Converter

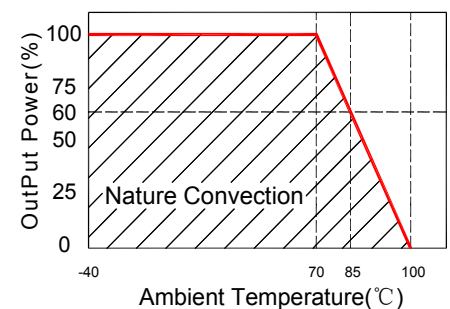
68DW5 SERIES

5-6Watt 1.5KV Isolated

4 : 1 Input Voltage Range

Single & Dual Output

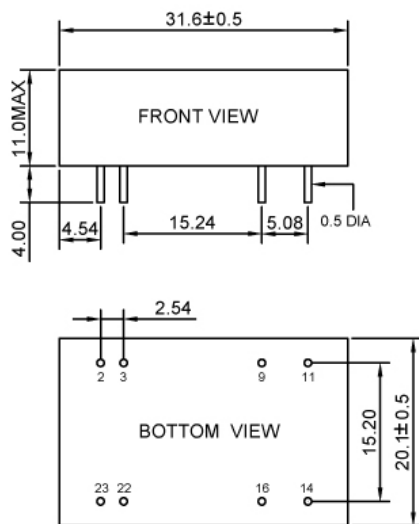
1.25" x 0.8"

**Temperature Derating Graph**

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			200		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated Copper With Non-Conductive Base				
Weight			16.2		g
Dimensions		31.60x20.10x11.0			mm

Markings and dimensions



UNIT : mm Unless otherwise specified, all tolerances are ±0.25

PIN Connection

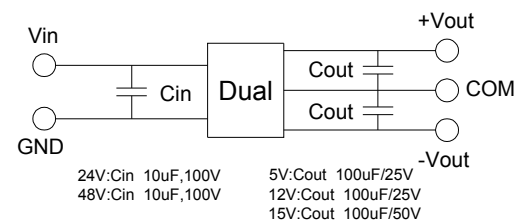
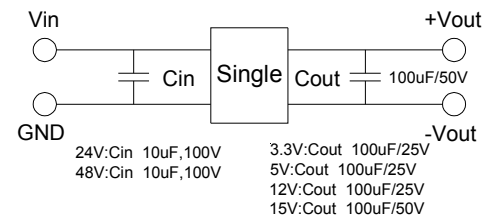
Pin	2.3	9	11	14	16	22.23
Single	-Vin	No Pin	NC	+Vout	-Vout	+Vin
Dual	-Vin	Com	-Vout	+Vout	Com	+Vin

Part Number

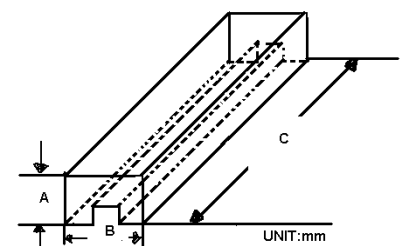
68DW5 - 24 S 05 R N NL
 A B C D E F G

- A : Series
- B : Input Voltage
- C : Single(S);Dual(D)
- D : Output Voltage
- E : Regulated(R)
- F : Package
- G : RoHS Version

Recommended Test Circuit



Packaging



SIZE(mm)		
A	B	C
18.71	23.00	522