

CS8-DW-Single SERIES 2 Watt 1KV & 3KV Isolated DC-DC Converter 4 : 1 Input Voltage Range SIP8



FEATURES :

- 4:1 Wide Input Voltages Range
- High Efficiency up to 80%
- Regulated Output Types
- Low Ripple and Noise
- Internal SMD Construction
- 1KVDC & 3KVDC Isolation
- Operating Temperature: -40°C to +85°C
- Industry Standard Pinout
- Continuous Short Circuit Protection With Current Foldback



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

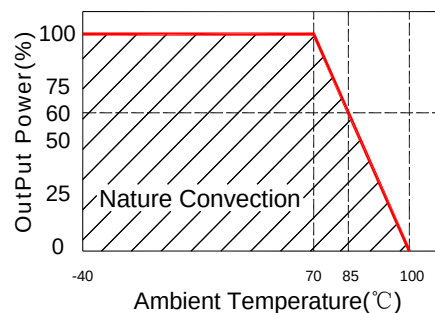
Part Number	Input Voltage Range	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
CS8-DW-24S05RNL/3KV	9-36	5	400	75
CS8-DW-24S09RNL/3KV	9-36	9	222	80
CS8-DW-24S12RNL/3KV	9-36	12	167	80
CS8-DW-24S15RNL/3KV	9-36	15	133	80
CS8-DW-24S24RNL/3KV	9-36	24	84	80
CS8-DW-48S05RNL/3KV	18-75	5	400	70
CS8-DW-48S09RNL/3KV	18-75	9	222	80
CS8-DW-48S12RNL/3KV	18-75	12	167	80
CS8-DW-48S15RNL/3KV	18-75	15	133	80
CS8-DW-48S24RNL/3KV	18-75	24	84	80

NOTE:

No suffix is standard isolation (1KVDC) e.g. CS8-DW-24S05RNL

*add suffix /3KV for 3KVDC isolation, e.g. CS8-DW-24S05R3KV

Temperature Derating Graph



Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			4:1	
Filter	Capacitor				

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±3	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±0.8	%
Ripple & Noise	Output: 5-9V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output: 12-24V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	50% load step change		350		us

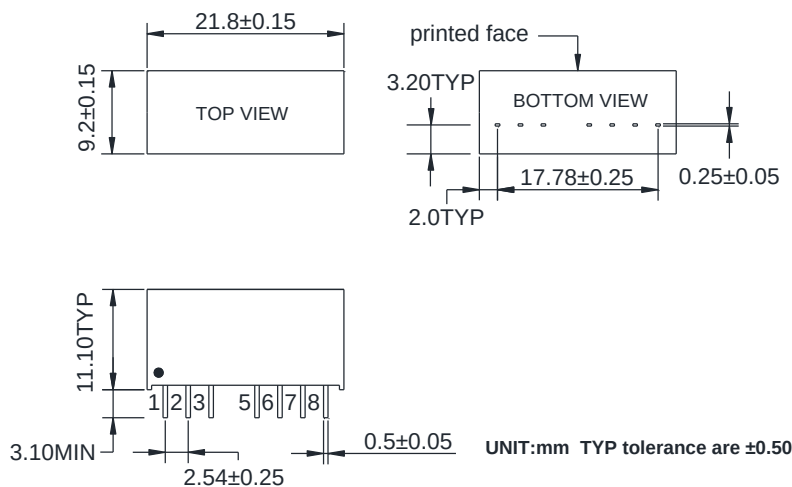
CS8-DW-Single SERIES 2 Watt 1KV & 3KV Isolated DC-DC Converter 4 : 1 Input Voltage Range SIP8



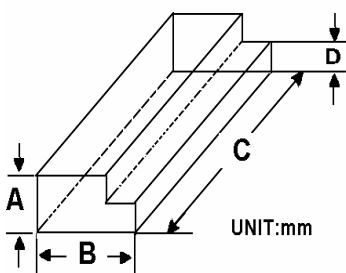
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			4.5		g
Dimensions		21.8X9.2X11.1			mm

Markings and Dimensions



Packaging



Size(mm)			
A	B	C	D
12.0	28.55	550	6.00

Part Number

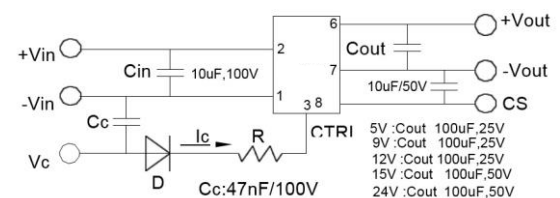
CS8-DW	-	24	S	05	R	NL
A		B	C	D	E	F

A : Series
 B : Input Voltage
 C : Single Output
 D : Output Voltage
 E : Regulated(R)
 F : RoHS Version

CS8-DW	-	24	S	05	R	3KV
A		B	C	D	E	F

A : Series
 B : Input Voltage
 C : Single Output
 D : Output Voltage
 E : Regulated(R)
 F : Isolation Voltage

Recommended Test Circuit



1. When open or high impedance, the converter works well; when this pin is 'high', the converter shut down. It should be note that the input current should be between 5-10mA, exceeding the maximum 20mA will cause permanent damage to the converter.

2. To make sure the product work at perfect operation status with full loading external capacitor is necessary and it is recommended to use high frequency low resistance electrolytic capacitor.

PIN Connection

Pin	1	2	3	5	6	7	8
1KV	-Vin	+Vin	Ctrl-Control input can (can be left open)	NE-No external connection allowed	+Vout	-Vout	CS Optional External capacitor
3KV	-Vin	+Vin	Ctrl-Control input can (can be left open)	NO PIN	+Vout	-Vout	NC