

C16D-Single SERIES 1Watt 1KV Isolated DC-DC Converter 2 : 1 Input Voltage Range SIP8



FEATURES :

- 2:1 Wide Input Voltages Range
- High Efficiency up to 85%
- Regulated Output Types
- Low Ripple and Noise
- Internal SMD Construction
- Operating Temperature: -40~+85°C
- Industry Standard Pinout
- Continuous Short Circuit Protection with Current Foldback



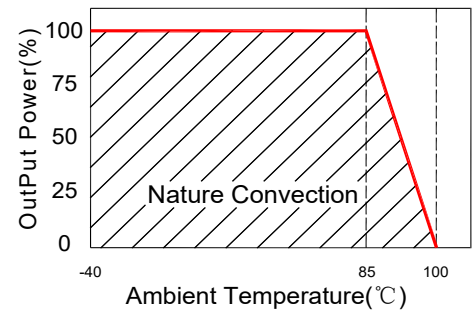
Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
C16D-05S05R*2NL	5-9	5	200	60
C16D-05S09R*2NL	5-9	9	111	70
C16D-05S12R*2NL	5-9	12	84	70
C16D-05S15R*2NL	5-9	15	67	70
C16D-05S24R*2NL	5-9	24	42	70
C16D-12S05R*2NL	9-18	5	200	70
C16D-12S09R*2NL	9-18	9	111	80
C16D-12S12R*2NL	9-18	12	84	80
C16D-12S15R*2NL	9-18	15	67	80
C16D-12S24R*2NL	9-18	24	42	80
C16D-24S05R*2NL	18-36	5	200	75
C16D-24S09R*2NL	18-36	9	111	80
C16D-24S12R*2NL	18-36	12	84	80
C16D-24S15R*2NL	18-36	15	67	80
C16D-24S24R*2NL	18-36	24	42	80
C16D-48S05R*2NL	36-72	5	200	70
C16D-48S09R*2NL	36-72	9	111	80
C16D-48S12R*2NL	36-72	12	84	80
C16D-48S15R*2NL	36-72	15	67	80
C16D-48S24R*2NL	36-72	24	42	80

Note:

No suffix "2" is standard PIN Connection e.g. C16D-24S24RNL, C16D-05S15RNL
add suffix "2" for PIN5,8 NC e.g. C16D-24S24R2NL C16D-05S15R2NL

Temperature Derating Graph



Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types	Vo, Io Nom			2:1	
Filter	Capacitor				

C16D-Single SERIES 1Watt 1KV Isolated DC-DC Converter 2 : 1 Input Voltage Range SIP8



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:5V-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

Part Number

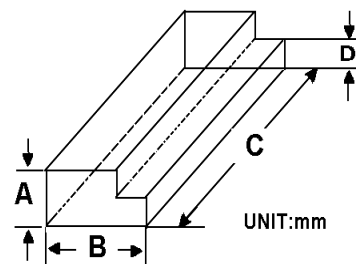
C16D - 05 S 24 R 2 NL
A B C D E F G

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

General Specifications

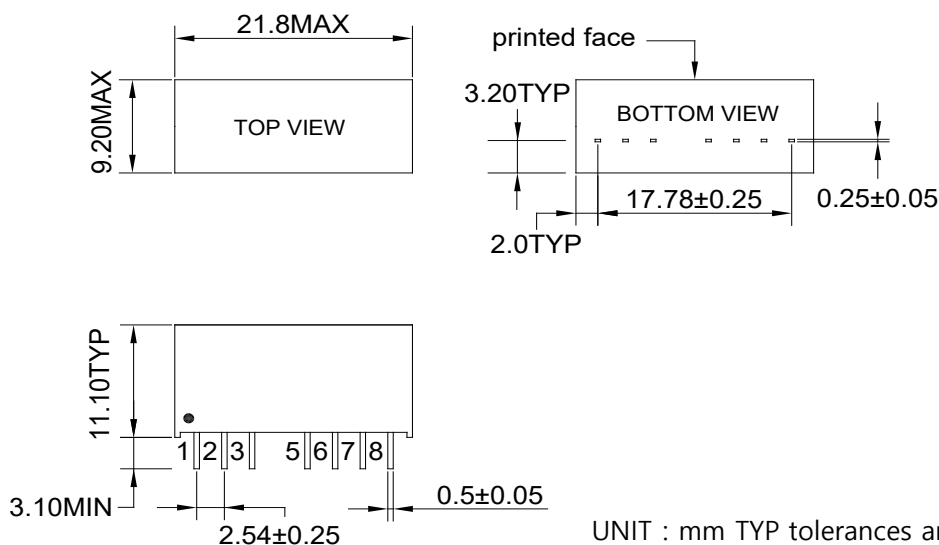
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			4.5		g
Dimensions			21.8x9.2x11.1		mm

Packaging



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

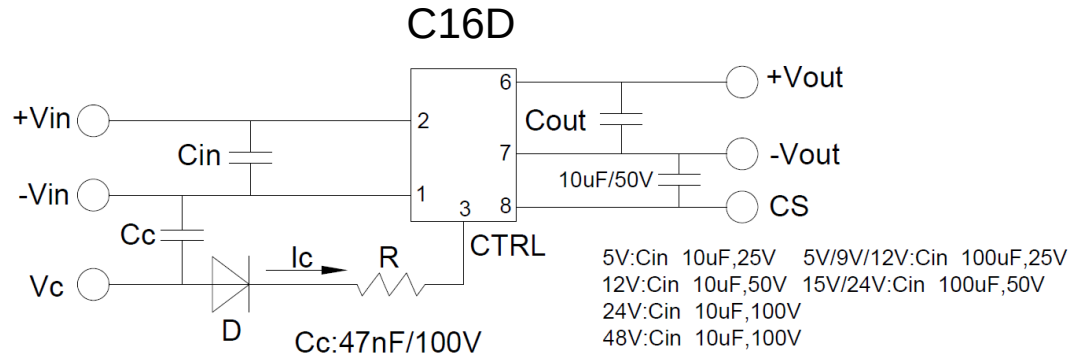
Markings and Dimensions



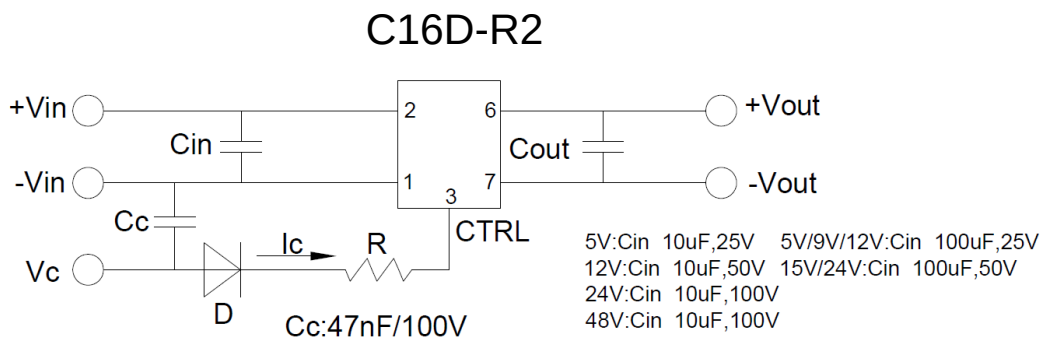
C16D- Single SERIES 1Watt 1KV Isolated DC-DC Converter 2 : 1 Input Voltage Range SIP8



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.



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
C16D	-Vin	+Vin	Ctrl-Control input can (can be left open)	NE-No external connection allowed	+Vout	-Vout	CS Optional External capacitor
C16D-R2	-Vin	+Vin	Ctrl-Control input can (can be left open)	NC	+Vout	-Vout	NC