

FEATURES :

- 2:1Wide Input Voltages Range
- 7PIN SIP Package
- High Efficiency up to 83%
- Regulated Output Types
- Internal SMD Construction
- No External Component Required
- Operating Temperature:-40°C to +85°C
- Industry Standard Pinout

YUAN DEAN SCIENTIFIC



DC-DC Converter

12DZ-2W SERIES

2Watt 3KV Isolated

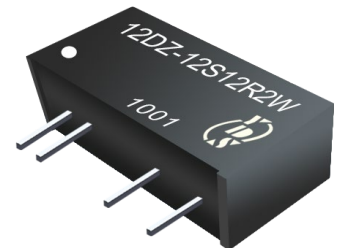
2 : 1 Input Voltage Range

Single Output

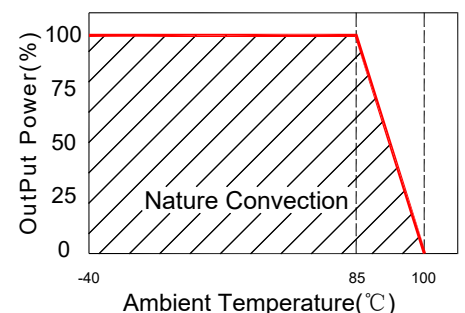
SIP7

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
12DZ-05S05R2W	4.5-9	5	400	70
12DZ-05S09R2W	4.5-9	9	222	72
12DZ-05S12R2W	4.5-9	12	167	75
12DZ-05S15R2W	4.5-9	15	133	78
12DZ-05S24R2W	4.5-9	24	84	80
12DZ-12S05R2W	9-18	5	400	75
12DZ-12S09R2W	9-18	9	222	78
12DZ-12S12R2W	9-18	12	167	80
12DZ-12S15R2W	9-18	15	133	80
12DZ-12S24R2W	9-18	24	84	83
12DZ-24S05R2W	18-36	5	400	76
12DZ-24S09R2W	18-36	9	222	78
12DZ-24S12R2W	18-36	12	167	80
12DZ-24S15R2W	18-36	15	133	80
12DZ-24S24R2W	18-36	24	84	83



Temperature Derating Graph



Input Specifications

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



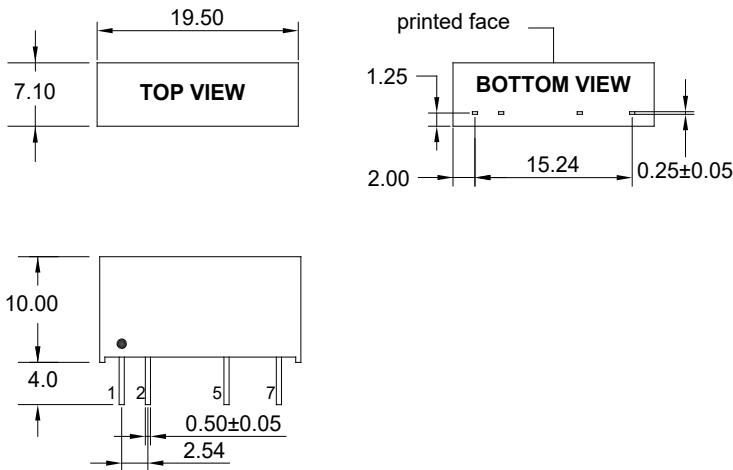
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±5	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±1.5	%
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

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			2.7		g
Dimensions			19.5x7.1x10.0		mm

Markings and Dimensions



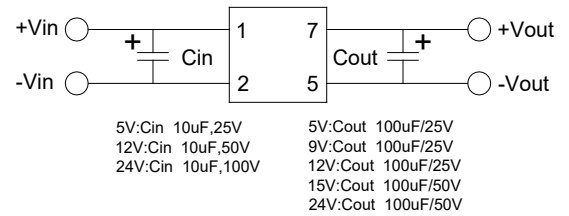
UNIT : mm Unless otherwise specified, all tolerances are ±0.25

Part Number

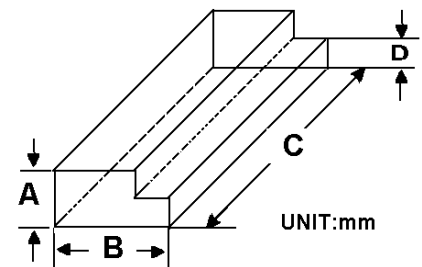
12DZ - 05 S 05 R 2W
A B C D E F

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

Recommended Test Circuit



Packaging



Size(mm)			
A	B	C	D
9.5	16.5	52.2	5.0

PIN Connection

Pin	1	2	5	7
Single	+Vin	-Vin	-Vout	+Vout

