

FEATURES :

- 2:1Wide Input Voltages Range
- 7PIN SIP Package
- High Efficiency up to 80%
- 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 SERIES

1Watt 3KV Isolated

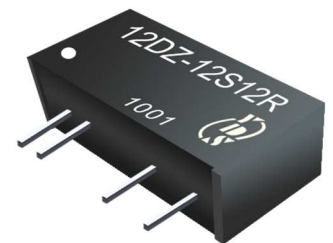
2 : 1 Input Voltage Range

Single Output

SIP7

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

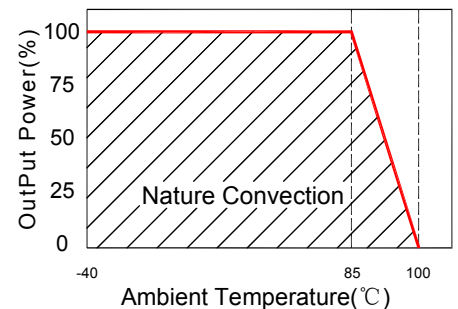
Part Number	Input Voltage	Output Voltage	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
12DZ-05S05R	4.5-9	5	200	65
12DZ-05S09R	4.5-9	9	112	70
12DZ-05S12R	4.5-9	12	84	70
12DZ-05S15R	4.5-9	15	67	70
12DZ-05S24R	4.5-9	24	42	75
12DZ-12S05R	9-18	5	200	70
12DZ-12S09R	9-18	9	112	72
12DZ-12S12R	9-18	12	84	73
12DZ-12S15R	9-18	15	67	75
12DZ-12S24R	9-18	24	42	80
12DZ-24S05R	18-36	5	200	75
12DZ-24S09R	18-36	9	112	75
12DZ-24S12R	18-36	12	84	78
12DZ-24S15R	18-36	15	67	78
12DZ-24S24R	18-36	24	42	80



Input Specifications

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

Temperature Derating Graph



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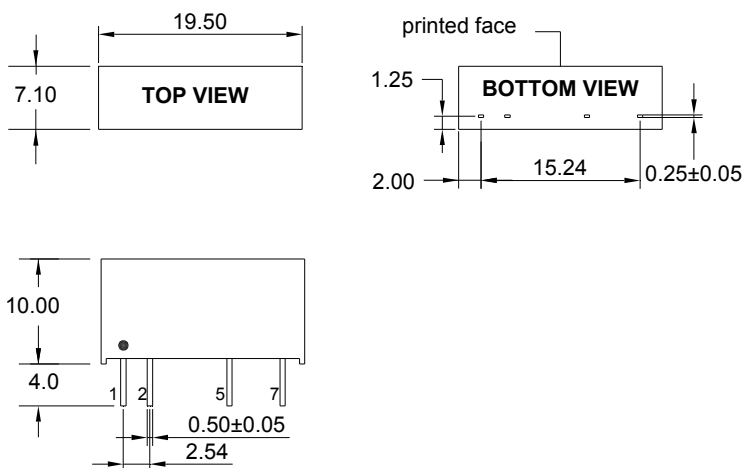
Output Specifications

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



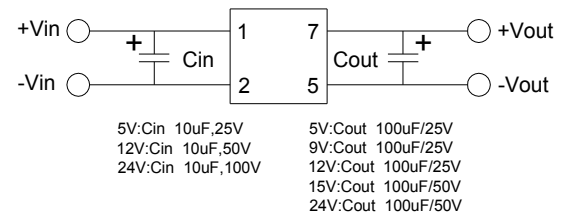
UNIT : mm Unless otherwise specified, all tolerances are ±0.25

Part Number

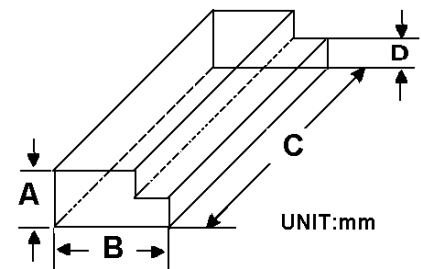
12DZ - 05 S 05 R
A B C D E

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

Recommended Test Circuit



Packaging



Size(mm)			
A	B	C	D
9.5	16.5	522	5.0

PIN Connection

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