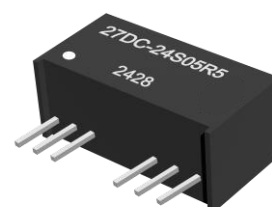
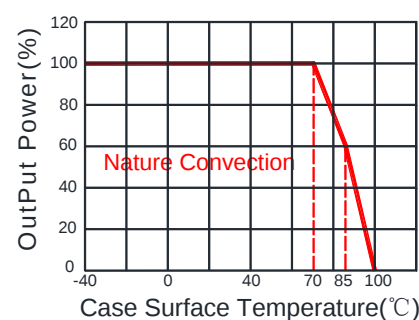


**FEATURES :**

- 4:1 Wide Input Voltages Range
- High Efficiency Up to 85%
- Regulated Output Types
- Low Ripple and Noise
- Internal SMD Construction
- 1.6KVDC Isolation
- Operating Temperature : -40°C to +85°C
- Industry Standard Pinout
- Continuous Short Circuit Protection with Current Foldback

Volgen**DC-DC Converter****27DC-5W SERIES****5Watt 1.6KV Isolated****4 : 1 Input Voltage Range****Single / Dual Output****SIP8****Temperature Derating Graph**

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	Capacitive Load(μF)
	Vdc	Vdc	mA	%TYP	Max.
27DC-24S05R5	9-36	5	1000	81	1000
27DC-24S09R5	9-36	9	556	82	470
27DC-24S12R5	9-36	12	417	84	470
27DC-24S15R5	9-36	15	333	84	220
27DC-24S24R5	9-36	24	208	84	100
27DC-24D05R5	9-36	±5	±500	81	470
27DC-24D09R5	9-36	±9	±278	82	220
27DC-24D12R5	9-36	±12	±208	84	120
27DC-24D15R5	9-36	±15	±167	84	100
27DC-24D24R5	9-36	±24	±104	84	68
27DC-48S05R5	18-75	5	1000	82	680
27DC-48S09R5	18-75	9	556	82	330
27DC-48S12R5	18-75	12	417	85	330
27DC-48S15R5	18-75	15	333	85	150
27DC-48S24R5	18-75	24	208	85	68
27DC-48D05R5	18-75	±5	±500	80	470
27DC-48D09R5	18-75	±9	±278	82	220
27DC-48D12R5	18-75	±12	±208	85	100
27DC-48D15R5	18-75	±15	±167	85	68

CONTACT US

KAGA FEI America, Inc.
2349 Bering Drive
San Jose, CA 95131

Phone: (408) 570-0955
Fax: (408) 570-0186
Toll Free: (888) 2 - VOLGEN

www.volgen.com
Email: information@volgen.com

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Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			4:1	
Surge Voltage (1sec max)	24 Vin			50	Vdc
	48 Vin			80	Vdc
Input Current	LOAD:0%		5		mA
Start-up Time	24 Vin			9	Vdc
	48 Vin			18	Vdc
Shutdown Voltage	24/48 Vin		6.5/14.5		Vdc
Start-up Time	Nominal input voltage & Nominal load		20		ms
CTRL	Module on		Ctrl pin open		
	Module off		Ctrl pin to 2.5 ~ 12Vdc		
Filter	Capacitor				

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load		2	±3	%
Line Regulation	Regulated			±1.0	%
Load Regulation	Regulated			±1.5	%
Ripple & Noise	BW=DC To 20MHz			150	mVp-p
Transient response setting time	50% load step change		350		us
Cross Regulation	Dual outputs, Vo1 load at 50%, Vo2 load at range of 10%-100%			±5	%
Temperature Coefficient	100% Load		±0.02	±0.03	%/°C
Over-current Protection	Input voltage range	110		250	%Io
Short Circuit Protection	Input voltage range		Continuous, self-recovery		

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Isolation Voltage	Input / Output		1600Vdc/ 0.5mA/60Sec		
Isolation Capacitance	Input-output capacitance at 100kHz/0.1V		1000		pF
Switching Frequency	Full load, nominal input		330		KHz
Operating Temperature	Temperature Derating Graph	-40		85	°C
Storage Temperature		-55		125	°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

Part Number

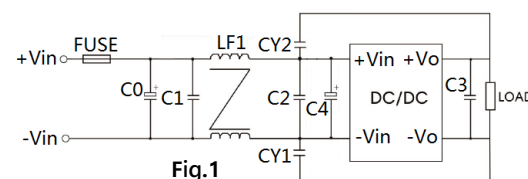
27DC	-	XX	X	XX	R	5
A		B	C	D	E	F

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

Electromagnetic Compatibility (EMC)

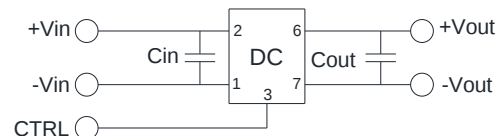
Parameters	Standards & Level	
EMI	CISPR32/EN55032 CLASS B (see Fig.1 for recommended circuit)	
EMS	CISPR32/EN55032 CLASS B	
ESD	IEC/EN61000-4-2 Contact ±4kV	perf. Criteria B
Radiated immunity	IEC/EN61000-4-3 10V/m	perf. Criteria A
Fast transient	IEC/EN61000-4-4 ±2kV	perf. Criteria B
Surge	IEC/EN61000-4-5 ±2kV	perf. Criteria B
CS	IEC/EN61000-4-6 3 Vr.m.s	perf. Criteria A

EMC Compliance Circuit



EMC recommended circuit value table		
EMI	C0C4	330μF /100V
	C1C2	10μF /100V
	CY1CY2	1nF/2kV
	C3	Recommended Test Circuit
	LF1	470μH

Recommended Test Circuit



To make sure the product work at perfect operation status with full loading external capacitor is necessary and it is recommended to use high

Vin	Cin	Single Vout	Cout	Dual Vout	Cout
24Vdc	10μF/100V	3.3Vdc	100μF/16V	±5Vdc	±100μF/16V
		5Vdc	100μF/16V	±9Vdc	±100μF/16V
48Vdc	10μF/100V	9Vdc	100μF/16V	±12Vdc	±100μF/25V
		12Vdc	100μF/25V	±15Vdc	±100μF/25V
- -	- -	15Vdc	100μF/25V	±24Vdc	±100μF/50V
- -	- -	24Vdc	100μF/50V	- -	- -

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 San Jose, CA 95131

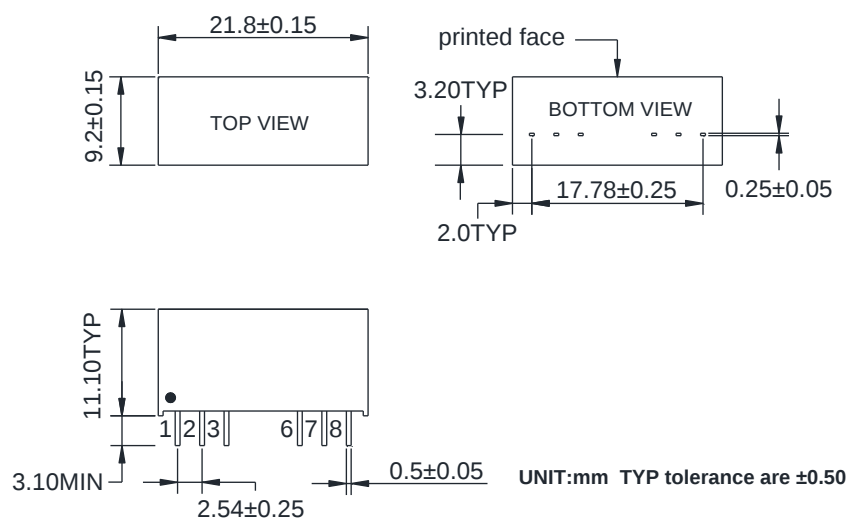
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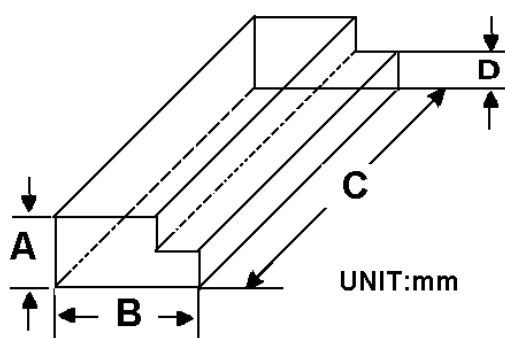
Markings and Dimensions



PIN Connection

Pin	1	2	3	6	7	8
Single	-Vin	+Vin	Ctrl	+Vout	-Vout	NC
Dual	-Vin	+Vin	Ctrl	+Vout	COM	-Vout

Packaging



TUBE-----22pcs

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

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