

FEATURES :

- 15Watt Isolated Output
- Recognized by UL 60950-1
- Singles Dual and Triples
- Efficiency To 80%
- Remote ON/OFF Control
- Wide 4:1 Input Range
- 8PIN Package
- SIX-Sided Shielding
- 1500Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C to +100°C

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

Part Number	Input Voltage	Output 1 Voltage	Output 2 Voltage	Output 3 Voltage
	Vdc	Vdc	Vdc	Vdc
87D-24S05RNL	9-36	5@3A		
87D-24S12RNL	9-36	12@1.25A		
87D-24S15RNL	9-36	15@1A		
87D-24D12RNL	9-36		12@0.625A	-12@0.625A
87D-24D15RNL	9-36		15@0.5A	-15@0.5A
87D-24S05RT12RNL	9-36	5@1.5A	12@0.31A	-12@0.31A
87D-24S05RT15RNL	9-36	5@1.5A	15@0.25A	-15@0.25A
87D-48S05RNL	20-72	5@3A		
87D-48S12RNL	20-72	12@1.25A		
87D-48S15RNL	20-72	15@1A		
87D-48D12RNL	20-72		12@0.625A	-12@0.625A
87D-48D15RNL	20-72		15@0.5A	-15@0.5A
87D-48S05RT12RNL	20-72	5@1.5A	12@0.31A	-12@0.31A
87D-48S05RT15RNL	20-72	5@1.5A	15@0.25A	-15@0.25A

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Filter	Capacitor				

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DC-DC Converter

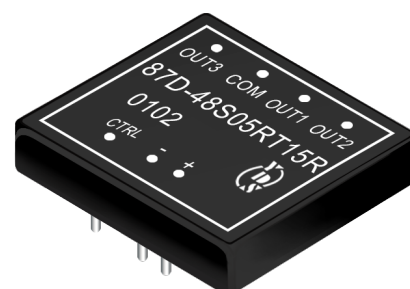
87D SERIES

15Watt 1.5KV Isolated

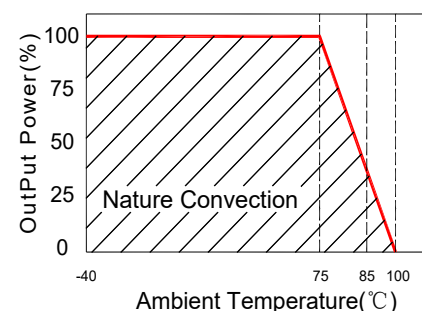
4 : 1 Input Voltage Range

Triple Output

2" x 2"



Temperature Derating Graph



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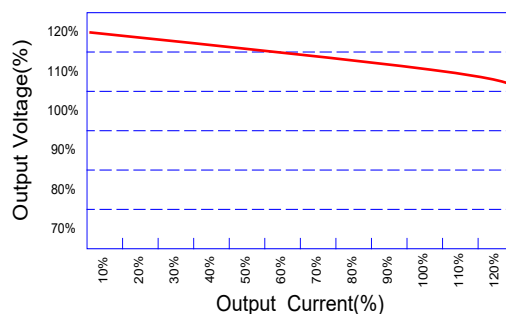
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Single Voltage Tolerance				±1	%
Dual +Voltage Tolerance				±3	%
Dual -Voltage Tolerance				±1	%
Triple	5V			±5	%
Triple	12V/15V			±2	%
Triple	-5V			±1	%
Short Circuit Protection	Continuous				
Line Regulation	Single/Dual(H.L To L.L)			±0.2	%
Load Regulation	Single/Dual (F.L To 1/4F.L)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Line Regulation	Triple(H.L To L.L)			±1.0	%
Load Regulation	Triple(F.L To 1/4F.L)			±0.2	%
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			100		KHz
Operating Temperature		-40		100	°C
Humidity	Non-Condensing	5		95	%
Cooling	Free air Convection				
Case material	Nickel Coated with Non-Conductive Base or Black Coated Copper with Non-Conductive Base				
Weight			60.2		g
Dimensions			50.8x50.8x10.7		mm
Potting Material			Epoxy (UL94V-0 rated)		
Conducted Emissions	EN55022		CLASS A		
Radiated Emissions	EN55022		CLASS A		

Tolerance Envelope Graph

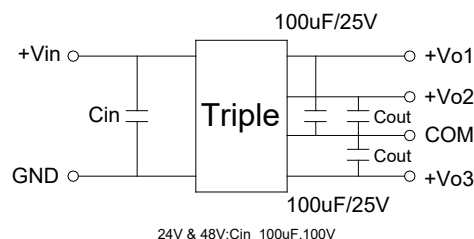
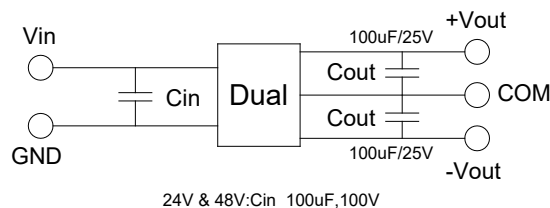
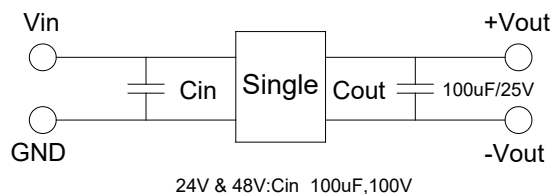


Part Number

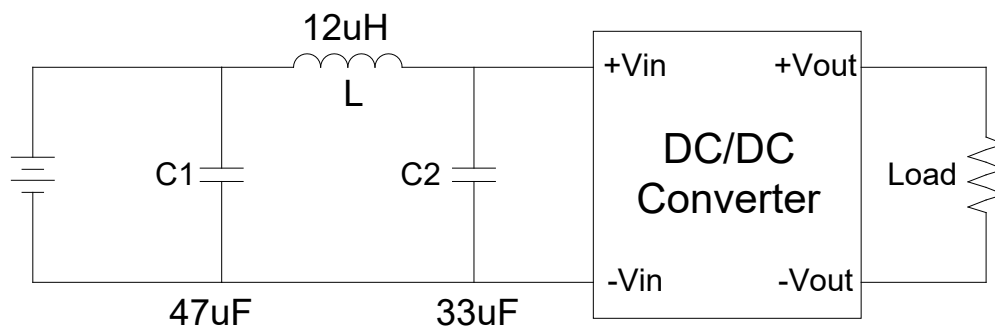
87D - 24 S 05 R T 12 R NL
A B C D E F G H I

- A: Series
- B: Input Voltage
- C: Single (S) / Dual (D)
- D: Output Voltage
- E: Regulated(R)
- F: Triple(T)
- G: Output Voltage
- H: Regulated(R)
- I: RoHs Version

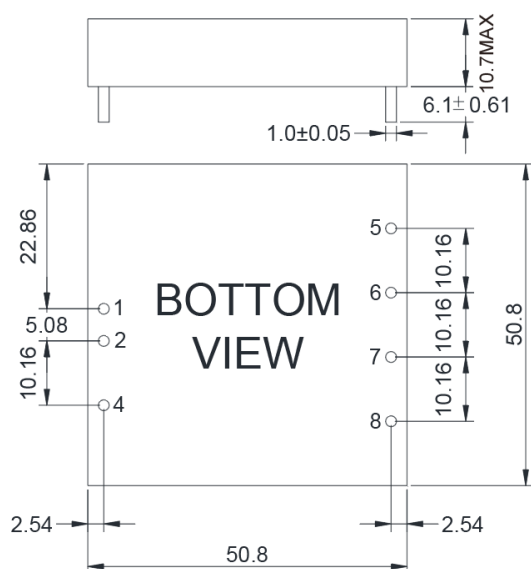
Recommended Test Circuit



Suggest adding input external filter(C1,C2,L)to meet conducted emissions(EN55022 class A)

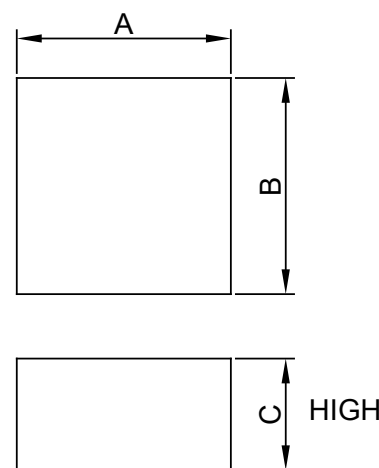


Markings and Dimensions



UNIT: mm XX.X±0.5 XX.XX±0.25

Packaging



Size(mm)		
A	B	C
51.50	52.30	27.00

PIN Connection

Pin	1	2	3	4	5	6	7	8
Single	+Vin	-Vin	NO PIN	Control	NO PIN	Output 1	-Output 1	Trim
Dual	+Vin	-Vin	NO PIN	Control	Output 2	Com	Output 3	Trim
Triple	+Vin	-Vin	NO PIN	Control	Output 2	Output 1	Com	Output 3