

ASD07

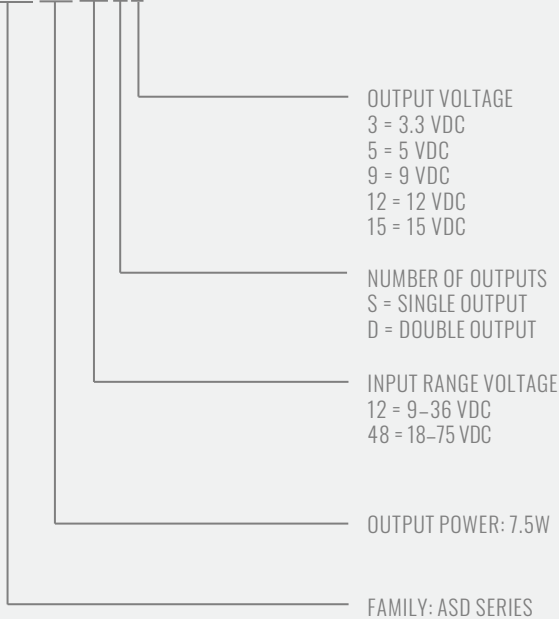
ISOLATED AND REGULATED 7.5-WATT MODULAR DC/DC CONVERTERS

The ASD07 series of 7.5-watts Modular DC/DC Converters – is your ultimate solution for isolated and regulated power needs. Featuring a wide 4:1 input range of 9 to 36V or 18 to 75V, these converters boast high efficiency and regulated outputs for optimal performance. With 1500VDC isolation and full EMI shielding, rest assured that your power supply is secure and reliable. Complete with standard pinouts, the ASD07 series is the perfect choice for your power conversion requirements.



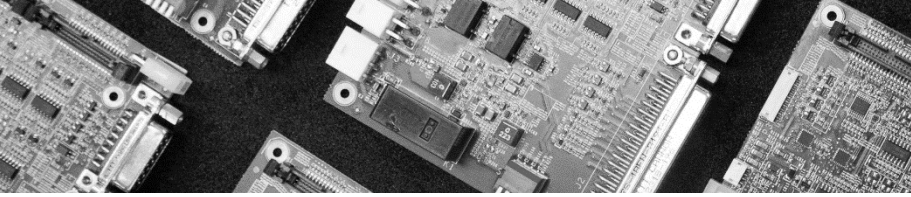
HOW TO ORDER

ASD07-12S3



FEATURES

- DC INPUT Wide 4:1**
Nominal: 12VDC 48VDC
Range: 9-36VDC 18-75VDC
- OUTPUT RANGE**
5 Watts Output
- OPERATING TEMPERATURE**
-25 to +71°C(FL)
- SAFETY APPROVALS**
Mil Std 217, 25°C
- SHOCK/VIBRATION**
MIL-STD 810°C
- HIGH EFFICIENCY**
- ISOLATION**
1500VDC (48V)
- FULL EMI SHIELDING**
- STANDARD PINOUTS**



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PARAMETERS

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INPUT SPECIFICATIONS	
Input Voltage, Nominal	12VDC 48VDC
Input Voltage Ranges	9-36 18-75 VDC
Input Surge Voltage	50V (12V Models), * 100V (48V Models), * 10 mS duration, min.
OUTPUT SPECIFICATIONS	
Voltage and Current	See Selection Chart
Preset Accuracy	Singles: +/- 3% max. DUALS: +/- 4% max.
Cross Regulation (Duals)	5-8% typ.
Load Regulation	singles: +/- 0.5%
20% - FL	duals: +/-1%, +/-3% (5V mod)
Line Regulation	singles: +/- 0.5% duals: +/- 1%
Minimum Load	5% of Full Load
Temperature Coefficient	+/-0.03%/°C
Ripple/Noise (Pk-Pk, typ)	(Note 1)
	Single 3.3V 150mV
	Single 5V 100mV (12Vin), 150mV (48Vin)
	Single 9,12V 50mV (12Vin), 100mV (48Vin)
	Single 15V 50mV
	Dual 5V 150mV
	Dual 12, 15V 50mV
Overvoltage Protection	Clamp, 130-150%*
Short Circuit Protection	Clamp, need to release load*
<i>All specifications are typical at nominal input, full load, and 25°C unless otherwise noted</i>	
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long-term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.	
GENERAL SPECIFICATIONS	
On/Off Control	(Ref to - Input pin) Logic "1"/Open=ON Logic "0"/GND=OFF
Shutdown Idle Current	15mA
Input-Out Isolation	1500VDC (48V) 500 VDC (12V)
In/Out Capacitance	1000 pF
Efficiency at nom. Input	12V: 75%-84%, typ. 48V: 74%-81%, typ.
Switching Frequency	450Khz

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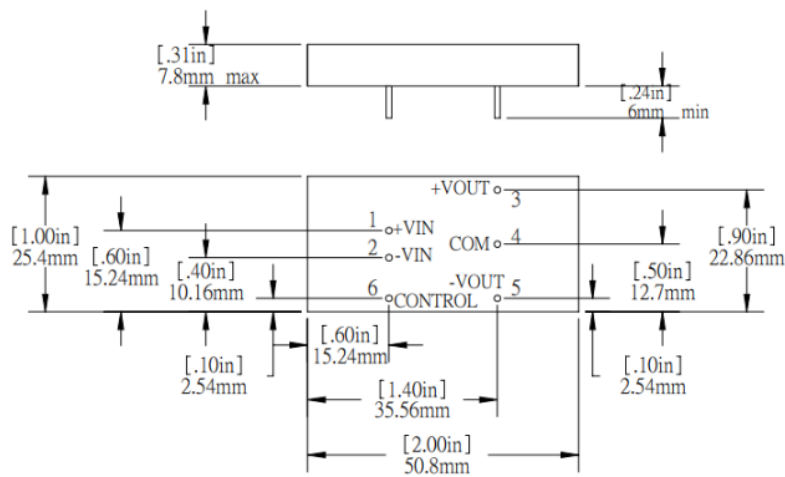
PARAMETERS ASD07

ENVIRONMENTAL SPECIFICATIONS	
Oper. Temperature	-25 to +71°C(FL)
Storage Temperature	-40 to +125°C *
Maximum Case Temp	110°C *
Input Fusing	12V: 4A, 48V: 2A
MTBF	1,000,000 Hrs Mil Std 217, 25°C
Shock/Vibration	To MIL-STD 810°C
Safety UL/cUL	UL60950-1 2 nd ed./ CAN/CSA C22.260950-1 2 nd ed.
PHYSICAL SPECIFICATIONS	
Case Material	Aluminum
Construction	Fully Encapsulated
Weight	0.64 oz, (18g)

NOTES

1. Ripple & Noise are measured by using a 20MHz bandwidth oscilloscope and terminating the output with a 47uF electrolytic capacitor paralleled with a 0.1uF ceramic capacitor

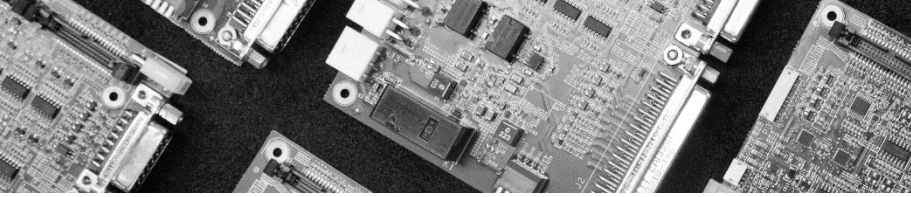
MECHANICAL DIMENSION



Pin# Single Outputs Dual Outputs

Pin#	Single Outputs	Dual Outputs
1	+Input	+Input
2	- Input	- Input
3	+Output	+Output
4	N/A	Common
5	- Output	- Output
6	Control	Control

TOLERANCES : .XX ± 0.5mm(0.02in)
: .XXX ± 0.25mm(0.01in)



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MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT AMPS	INPUT RANGE
Single Output			
ASD07-12S3	3.3 VDC	1.9	9-36 VDC
ASD07-48S3	3.3 VDC	1.9	18-75 VDC
ASD07-12S5	5 VDC	1.5	9-36 VDC
ASD07-48S5	5 VDC	1.5	18-75 VDC
ASD07-12S9	9 VDC	0.83	9-36 VDC
ASD07-48S9	9 VDC	0.83	18-75 VDC
ASD07-12S12	12 VDC	0.62	9-36 VDC
ASD07-48S12	12 VDC	0.62	18-75 VDC
ASD07-12S15	15 VDC	0.5	9-36 VDC
ASD07-42S15	15 VDC	0.5	18-75 VDC
Dual Output			
ASD07-12D5	+/-5 VDC	+/-0.75	9-36 VDC
ASD07-48D5	+/-5 VDC	+/-0.75	18-75 VDC
ASD07-12D12	+/-12 VDC	+/-0.31	9-36 VDC
ASD07-48D12	+/-12 VDC	+/-0.31	18-75 VDC
ASD07-12D15	+/-15 VDC	+/-0.25	9-36 VDC
ASD07-48D15	+/-15 VDC	+/-0.25	18-75 VDC

OUTPUT DERATING CURVE

