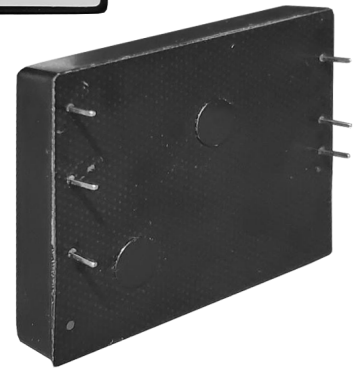


ASD15

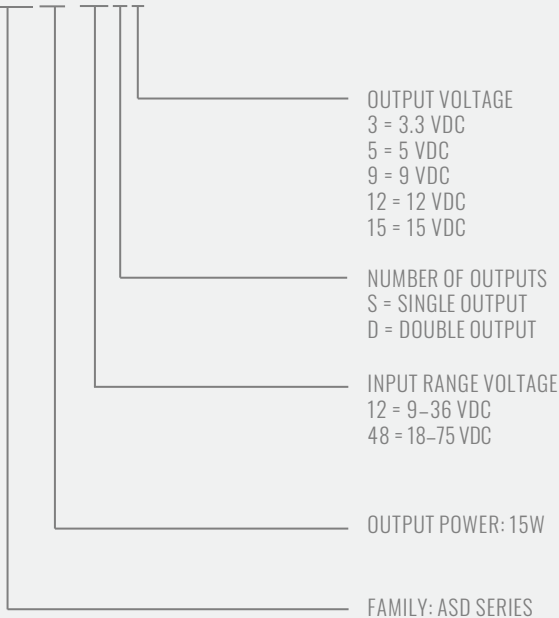
ISOLATED AND REGULATED 15-WATT MODULAR DC/DC CONVERTER

The cutting-edge ASD15 series of isolated and regulated 15-watts modular DC/DC converters is designed to meet your power needs with precision and efficiency. With a wide 4:1 input range of 9 to 36V or 18 to 75V available, these converters offer high efficiency and regulated outputs for reliable performance. Featuring 1500VDC isolation and full EMI shielding, along with standard pinouts for easy integration, the ASD15 series is the perfect solution for your power conversion requirements.



HOW TO ORDER

ASD15-12S3



FEATURES

DC INPUT Wide 4:1

Nominal: 12VDC	48VDC
Range: 9-36VDC	18-75VDC

OUTPUT RANGE

15 Watts Output

OPERATING TEMPERATURE

-25 to +71°C(FL)

SAFETY APPROVALS

Mil Std 217, 25°C

SHOCK/VIBRATION

MIL-STD 810°C

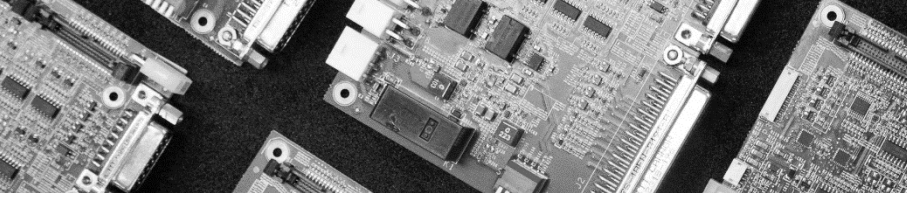
HIGH EFFICIENCY

ISOLATION

1500VDC (48V)

FULL EMI SHIELDING

STANDARD PINOUTS



ASD15

ISOLATED AND REGULATED 15-WATT MODULAR DC/DC CONVERTER

PARAMETERS

ASD15

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
Load Regulation	singles: +/- 0.5%
20% - FL	duals: +/-1%, +/-3% (5V mod)
Preset Accuracy	Singles: +/- 3% max. Duals: +/- 4% max.
Line Regulation	singles: +/- 0.5% duals: +/- 1%
Trim Range	0.5V min, 0.65V typ
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%*
Voltage Stability	+/-0.5%, max
Transient Response	12V: +/-4%, max 15V: +/-3%, max All others: +/-2%, max
Short Circuit Protection	Clamp, need to release load*

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

* 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



ISOLATED AND REGULATED 15-WATT MODULAR DC/DC CONVERTER

ASD15

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

BOTTOM VIEW

Dimensions (inches in brackets, millimeters):

- Top left: [1.60in] 40.64mm
- Top left: [.20in] 5.08mm
- Top left: [.40in] 10.16mm
- Top left: [.30in] 7.62mm
- Top left: [.10in] 2.54mm
- Top left: [.180in] 45.72mm
- Top left: [.200in] 50.8mm
- Top left: [.40in] 10.16mm
- Top left: [.10in] 2.54mm
- Top left: [.40in] 10.16mm
- Top left: [.10in] 2.54mm
- Top left: [.375in] 9.525mm
- Top left: [.178in] 4.52mm
- Top left: [.03in] 0.64mm ±0.02mm

PIN #

1
2
3
4
5
6
7
8

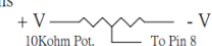
Tolerance :

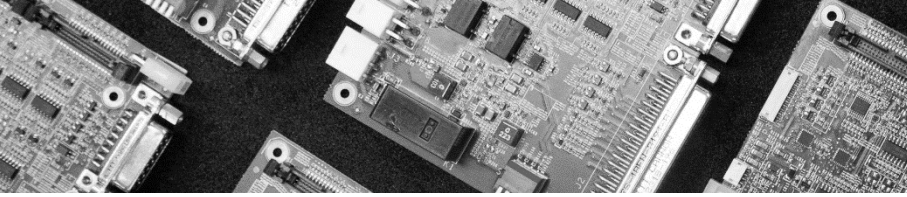
XX	0.5mm [0.02in]
XXX	0.25mm [0.01in]

Trim Co

Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	No Pin	No Pin
4	Control	Control
5	No Pin	+ Output
6	+ Output	Out.Ret.
7	Out.Ret.	- Output
8	Trim	Trim

Trim Connections





ASD15

ISOLATED AND REGULATED 15-WATT MODULAR DC/DC CONVERTER

MODEL NUMBER OUTPUT VOLTAGE OUTPUT AMPS INPUT RANGE

Single Output

ASD15-12S3	3.3 VDC	3.75	9-18 VDC
ASD15-48S3	3.3 VDC	3.75	20-75 VDC
ASD15-12S5	5 VDC	3	9-18 VDC
ASD15-48S5	5 VDC	3	20-75 VDC
ASD15-12S12	12 VDC	1.25	9-18 VDC
ASD15-48S12	12 VDC	1.25	20-75 VDC
ASD15-12S15	15 VDC	1	9-18 VDC
ASD15-42S15	15 VDC	1	20-75 VDC

Dual Output

ASD15-12D5	+/-5 VDC	+/-1.5	9-18 VDC
ASD15-48D5	+/-5 VDC	+/-1.5	20-75 VDC
ASD15-12D12	+/-12 VDC	+/-0.62	9-18 VDC
ASD15-48D12	+/-12 VDC	+/-0.62	20-75 VDC
ASD15-12D15	+/-15 VDC	+/-0.5	9-18 VDC
ASD15-48D15	+/-15 VDC	+/-0.5	20-75 VDC

OUTPUT DERATING CURVE

