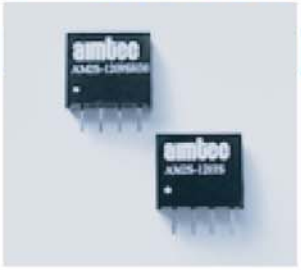
AM2S Series



2 watt dc-dc converters

- 4 PIN SIL PACKAGE
- LOW RIPPLE AND NOISE
- HIGH EFFICIENCY UP TO 85%
- INPUT/OUTPUT ISOLATION: 1000 or 3000VDC
- OPERATING TEMPERATURE: -40˚C ... +85˚C
- PIN-COMPATIBLE WITH OTHER MANUFACTURERS
- ULTRA MINIATURE PACKAGE

GENERAL DESCRIPTION

The AM2S series is a family of cost effective 2W single output DC-DC converters. These converters achieve low cost and ultra-miniature SIP4 pin size without compromising performance and reliability.

Forty eight models operate from input bus voltage of 5, 12 and 24VDC; producing output voltage levels of 3.3, 5, 7.2, 9, 12, 15, 18, 24VDC.
Full SMD-design and a 100% production test of parameters ensure a high reliability of this product.

ELECTRICAL SPECIFICATIONS

Specifications typical at +25˚C, nominal input voltage, rated output current unless otherwise specified

Input Specifications:	
Voltage range	±10%
Filter	Capacitor

Isolation Specifications:	
Rated voltage	1000VDC
	3000VDC
Leakage current	1mA
Resistance	> 1000MOhm
Capacitance	60pF, typ

Output Specifications:	
Voltage accuracy	±5%, max
Ripple and noise (at 20MHz BW)	150mVp-p, max
Short circuit protection	Momentary
Line voltage regulation	±1.2% / 1.0% of Vin
Load voltage regulation	±8%, load=20~100%
Temperature coefficient	±0.02%/˚C

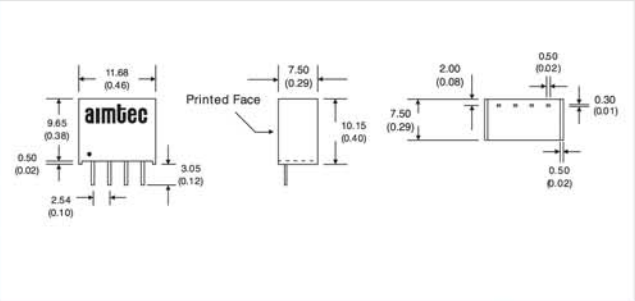
General Specifications:	
Efficiency	71% to 85%
Switching frequency	125KHz, typ

Environmental Specifications:	
Operating temperature (ambient)	-40˚C ... +85˚C
Storage temperature	-55˚C ... +125˚C
Derating	None required
Humidity (non-condensing)	Up to 90%
Cooling	Free-air Convection

Physical Specifications	
Dimensions	11.68x7.50x10.15mm
	0.46x0.29x0.40inches
Weight	2.5g
Case material	Non-conductive black plastic

MTBF: > 668000 hrs (MIL-HDBK-217F, Ground Benign, t=+25˚C)
Specifications are subject to change without notification

OUTLINE DIMENSIONS & PIN CONNECTIONS



Pin	1000, 3000VDC
	Single
1	-V input
2	+V input
3	-V output
4	+V output

MODELS
Single output

Models		Input voltage	Output voltage	Output current max.
Isolation 1000VDC	Isolation 3000VDC			
AM2S-0503S	AM2S-0503SH30	5V±10%	3.3VDC	400mA
AM2S-0505S	AM2S-0505SH30		5VDC	400mA
AM2S-0507S	AM2S-0507SH30		7.2VDC	278mA
AM2S-0509S	AM2S-0509SH30		9VDC	222mA
AM2S-0512S	AM2S-0512SH30		12VDC	167mA
AM2S-0515S	AM2S-0515SH30		15VDC	133mA
AM2S-0518S	AM2S-0518SH30		18VDC	111mA
AM2S-0524S	AM2S-0524SH30		24VDC	83mA
AM2S-1203S	AM2S-1203SH30	12V±10%	3.3VDC	400mA
AM2S-1205S	AM2S-1205SH30		5VDC	400mA
AM2S-1207S	AM2S-1207SH30		7.2VDC	278mA
AM2S-1209S	AM2S-1209SH30		9VDC	222mA
AM2S-1212S	AM2S-1212SH30		12VDC	167mA
AM2S-1215S	AM2S-1215SH30		15VDC	133mA
AM2S-1218S	AM2S-1218SH30		18VDC	111mA
AM2S-1224S	AM2S-1224SH30		24VDC	83mA
AM2S-2403S	AM2S-2403SH30	24V±10%	3.3VDC	400mA
AM2S-2405S	AM2S-2405SH30		5VDC	400mA
AM2S-2407S	AM2S-2407SH30		7.2VDC	278mA
AM2S-2409S	AM2S-2409SH30		9VDC	222mA
AM2S-2412S	AM2S-2412SH30		12VDC	167mA
AM2S-2415S	AM2S-2415SH30		15VDC	133mA
AM2S-2418S	AM2S-2418SH30		18VDC	111mA
AM2S-2424S	AM2S-2424SH30		24VDC	83mA

INPUT CURRENT
No Load / Full Load

5 Vin models	35 / 500mA, typ
12 Vin models	18 / 204mA, typ
24 Vin models	10 / 106mA, typ

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