



**FEATURES:**

- RoHS compliant
- 12 Pin SIP Package
- Low ripple and noise
- High efficiency up to 72%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1000, 3000 and 5200VDC
- Pin compatible with multiple manufacturers
- Regulated single output

**Models**  
**Single output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM3F-0503SZ	4.5-5.5	3.3	800	1000	53
AM3F-0505SZ	4.5-5.5	5	600	1000	67
AM3F-0507SZ	4.5-5.5	7.2	417	1000	64
AM3F-0509SZ	4.5-5.5	9	333	1000	67
AM3F-0512SZ	4.5-5.5	12	250	1000	72
AM3F-0515SZ	4.5-5.5	15	200	1000	72
AM3F-0518SZ	4.5-5.5	18	167	1000	65
AM3F-0524SZ	4.5-5.5	24	125	1000	70
AM3F-1203SZ	10.8-13.2	3.3	800	1000	55
AM3F-1205SZ	10.8-13.2	5	600	1000	67
AM3F-1207SZ	10.8-13.2	7.2	417	1000	64
AM3F-1209SZ	10.8-13.2	9	333	1000	67
AM3F-1212SZ	10.8-13.2	12	250	1000	72
AM3F-1215SZ	10.8-13.2	15	200	1000	72
AM3F-1218SZ	10.8-13.2	18	167	1000	66
AM3F-1224SZ	10.8-13.2	24	125	1000	70
AM3F-2403SZ	21.6-26.4	3.3	800	1000	55
AM3F-2405SZ	21.6-26.4	5	600	1000	65
AM3F-2407SZ	21.6-26.4	7.2	417	1000	61
AM3F-2409SZ	21.6-26.4	9	333	1000	65
AM3F-2412SZ	21.6-26.4	12	250	1000	70
AM3F-2415SZ	21.6-26.4	15	200	1000	70
AM3F-2418SZ	21.6-26.4	18	167	1000	66
AM3F-2424SZ	21.6-26.4	24	125	1000	72
AM3F-0503SH30Z	4.5-5.5	3.3	800	3000	53
AM3F-0505SH30Z	4.5-5.5	5	600	3000	67
AM3F-0507SH30Z	4.5-5.5	7.2	417	3000	64
AM3F-0509SH30Z	4.5-5.5	9	333	3000	67
AM3F-0512SH30Z	4.5-5.5	12	250	3000	72
AM3F-0515SH30Z	4.5-5.5	15	200	3000	72
AM3F-0518SH30Z	4.5-5.5	18	167	3000	65
AM3F-0524SH30Z	4.5-5.5	24	125	3000	70
AM3F-1203SH30Z	10.8-13.2	3.3	800	3000	55
AM3F-1205SH30Z	10.8-13.2	5	600	3000	67
AM3F-1207SH30Z	10.8-13.2	7.2	417	3000	64
AM3F-1209SH30Z	10.8-13.2	9	333	3000	67
AM3F-1212SH30Z	10.8-13.2	12	250	3000	72
AM3F-1215SH30Z	10.8-13.2	15	200	3000	72
AM3F-1218SH30Z	10.8-13.2	18	167	3000	66
AM3F-1224SH30Z	10.8-13.2	24	125	3000	70
AM3F-2403SH30Z	21.6-26.4	3.3	800	3000	55
AM3F-2405SH30Z	21.6-26.4	5	600	3000	65
AM3F-2407SH30Z	21.6-26.4	7.2	417	3000	61
AM3F-2409SH30Z	21.6-26.4	9	333	3000	65
AM3F-2412SH30Z	21.6-26.4	12	250	3000	70

**Models**  
**Single output (Continue)**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM3F-2415SH30Z	21.6-26.4	15	200	3000	70
AM3F-2418SH30Z	21.6-26.4	18	167	3000	66
AM3F-2424SH30Z	21.6-26.4	24	125	3000	72
AM3F-0503SH52Z	4.5-5.5	3.3	800	5200	53
AM3F-0505SH52Z	4.5-5.5	5	600	5200	67
AM3F-0507SH52Z	4.5-5.5	7.2	417	5200	64
AM3F-0509SH52Z	4.5-5.5	9	333	5200	67
AM3F-0512SH52Z	4.5-5.5	12	250	5200	72
AM3F-0515SH52Z	4.5-5.5	15	200	5200	72
AM3F-0518SH52Z	4.5-5.5	18	167	5200	65
AM3F-0524SH52Z	4.5-5.5	24	125	5200	70
AM3F-1203SH52Z	10.8-13.2	3.3	800	5200	55
AM3F-1205SH52Z	10.8-13.2	5	600	5200	67
AM3F-1207SH52Z	10.8-13.2	7.2	417	5200	64
AM3F-1209SH52Z	10.8-13.2	9	333	5200	67
AM3F-1212SH52Z	10.8-13.2	12	250	5200	72
AM3F-1215SH52Z	10.8-13.2	15	200	5200	72
AM3F-1218SH52Z	10.8-13.2	18	167	5200	66
AM3F-1224SH52Z	10.8-13.2	24	125	5200	70
AM3F-2403SH52Z	21.6-26.4	3.3	800	5200	55
AM3F-2405SH52Z	21.6-26.4	5	600	5200	65
AM3F-2407SH52Z	21.6-26.4	7.2	417	5200	61
AM3F-2409SH52Z	21.6-26.4	9	333	5200	65
AM3F-2412SH52Z	21.6-26.4	12	250	5200	70
AM3F-2415SH52Z	21.6-26.4	15	200	5200	70
AM3F-2418SH52Z	21.6-26.4	18	167	5200	66
AM3F-2424SH52Z	21.6-26.4	24	125	5200	72

**Input Specifications**

Parameters	Nominal	Typical	Maximum	Units
Voltage range	5	4.5-5.5		VDC
	12	10.8-13.2		
	24	21.6-26.4		
Filter	Capacitor			
Turn on Transient process time			100	ms
Start up time		300		ms
Absolute Maximum Rating	5 Vin	0-7		VDC
	12 Vin	0-15		
	24 Vin	0-28		
Peak Input Voltage time		100		ms

**Isolation Specifications**

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	3 sec	1000, 3000 and 5200		VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Short Circuit protection		Continuous		
Short circuit restart		Auto-recovery		
Line voltage regulation (Single)		±0.5		%
Load voltage regulation (Single)	0 to 100% load	±0.5		%

### Output Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Load voltage regulation (Single) 3.3V output model	0 to 100% load	±1.5		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	At 20MHz Bandwidth	75		mV p-p
Rising time		150		ms

### General Specifications

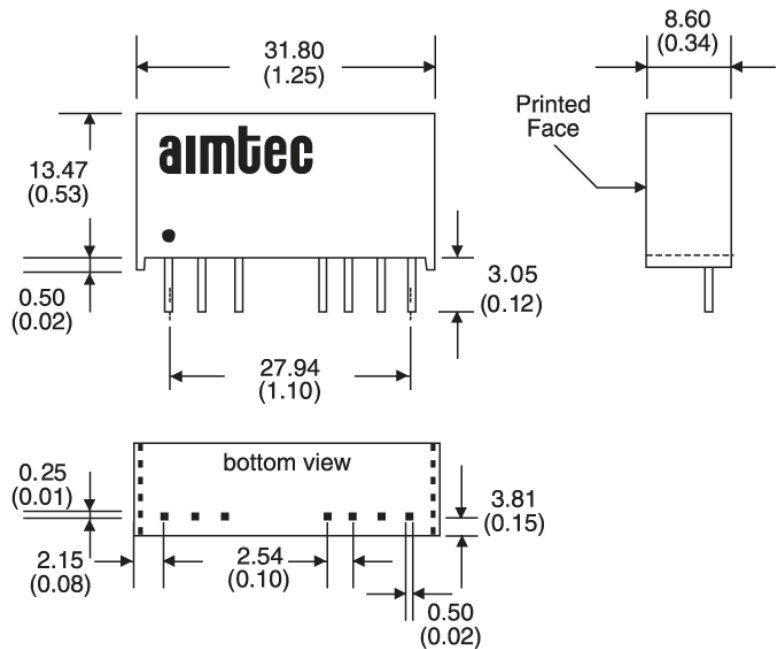
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	50		KHz
Operating temperature		-40 to +85		°C
Storage temperature		-40 to +125		°C
Max Case temperature			90	°C
Cooling	Free air convection			
Humidity			90	%
Case material	Non-conductive black plastic			
Weight		10.7		g
Dimensions (L x W x H)		1.25 x 0.34 x 0.53 inches	31.80 x 8.60 x 13.47 mm	
MTBF		>954 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

NOTE: All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified

### Pin Out Specifications

Pin	1000VDC	3000 & 5200VDC
1	+V Input	+V Input
2	N.C.	-V Input
3	N.C.	N.C.
9	N.C.	N.C.
10	-V Output	-V Output
11	+V output	+V output
12	-V Input	N.C.

### Dimensions



**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 5. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet.