

FEATURES:



- RoHS compliant
- Power modules for PCB mounting
- Capacitive loading up to 5500 μ F (36-75V Input)
- Remote On/Off control
- Operating temperature range: -40 to +85°C
- Soft start
- High efficiency
- Standard package
- UVLO / OVLO Shutdown
- Thermal shutdown

Models

Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise Typ.	Isolation (VDC)	Efficiency (%)
AM30K-1203SIZ	9-18	3.3	5.5	80 mV p-p	1500	81
AM30K-1205SIZ	9-18	5	5	80 mV p-p	1500	83
AM30K-1212SIZ	9-18	12	2.5	120 mV p-p	1500	86
AM30K-1215SIZ	9-18	15	2	150 mV p-p	1500	87
AM30K-2403SIZ	18-36	3.3	5.5	80 mV p-p	1500	82
AM30K-2405SIZ	18-36	5	5	80 mV p-p	1500	86
AM30K-2412SIZ	18-36	12	2.5	120 mV p-p	1500	88
AM30K-2415SIZ	18-36	15	2	150 mV p-p	1500	88
AM30K-4803SIZ	36-75	3.3	5.5	80 mV p-p	1500	82
AM30K-4805SIZ	36-75	5	5	80 mV p-p	1500	86
AM30K-4812SIZ	36-75	12	2.5	120 mV p-p	1500	88
AM30K-4815SIZ	36-75	15	2	150 mV p-p	1500	88

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise Typ.	Isolation (VDC)	Efficiency (%)
AM30K-1205DIZ	9-18	\pm 5	\pm 2.5	80 mV p-p	1500	83
AM30K-1212DIZ	9-18	\pm 12	\pm 1.25	120 mV p-p	1500	86
AM30K-1215DIZ	9-18	\pm 15	\pm 1	150 mV p-p	1500	87
AM30K-2405DIZ	18-36	\pm 5	\pm 2.5	80 mV p-p	1500	86
AM30K-2412DIZ	18-36	\pm 12	\pm 1.25	120 mV p-p	1500	88
AM30K-2415DIZ	18-36	\pm 15	\pm 1	150 mV p-p	1500	86
AM30K-4805DIZ	36-75	\pm 5	\pm 2.5	80 mV p-p	1500	86
AM30K-4812DIZ	36-75	\pm 12	\pm 1.25	120 mV p-p	1500	88
AM30K-4815DIZ	36-75	\pm 15	\pm 1	150 mV p-p	1500	88

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	12	9-18		VDC
	24	18-36		
	48	36-75		
Filter	π (Pi) Network			
Recommended input fuse (Slow Blow)	12 Vin		8A/250V	
	24 Vin		4A/250V	
	48 Vin		2A/250V	
Remote On/Off Control	On	3.5 to 12VDC or open circuit		
	Off	0 to 1.2VDC or short circuit between pin 2 and 4; typical idle current 3mA		
Absolute Maximum Rating	12 Vin		20	VDC
	24 Vin		40	
	48 Vin		80	
Permissible absolute maximum duration			2	hours

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec		1500	VDC
Resistance		> 1000		MOhm

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Short Circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Over load protection		Auto recovery works at 110% of rated output		
Over voltage protection		Zener diode clamp protection		
Line voltage regulation (Single)	HL-LL	±0.5		%
Line voltage regulation (Dual)	HL-LL	±0.5		%
Load voltage regulation (Single)	25-100%	±0.5		%
Load voltage regulation (Dual)	25-100%	±2		%
Temperature coefficient		±0.05		%/°C
Voltage adjustment range		±10		%

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	250		KHz
Operating temperature	With derating above 70°C	-40 to +85		°C
Storage temperature		-55 to +105		°C
Maximum case temperature			95	°C
Thermal shutdown		+105	+115	°C
Cooling		Free air convection		
Humidity			95	%
Case material	Nickel coated copper with non conductive base. Six Sided Shielded			
Weight		50		g
Dimensions (L x W x H)	Tolerance ±0.5mm	2.00 x 1.60 x 0.40 inches	50.80 x 40.60x 10.16 mm	
MTBF		> 550 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Soldering Temperature	1.5 mm from case for 10 sec		260	°C

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

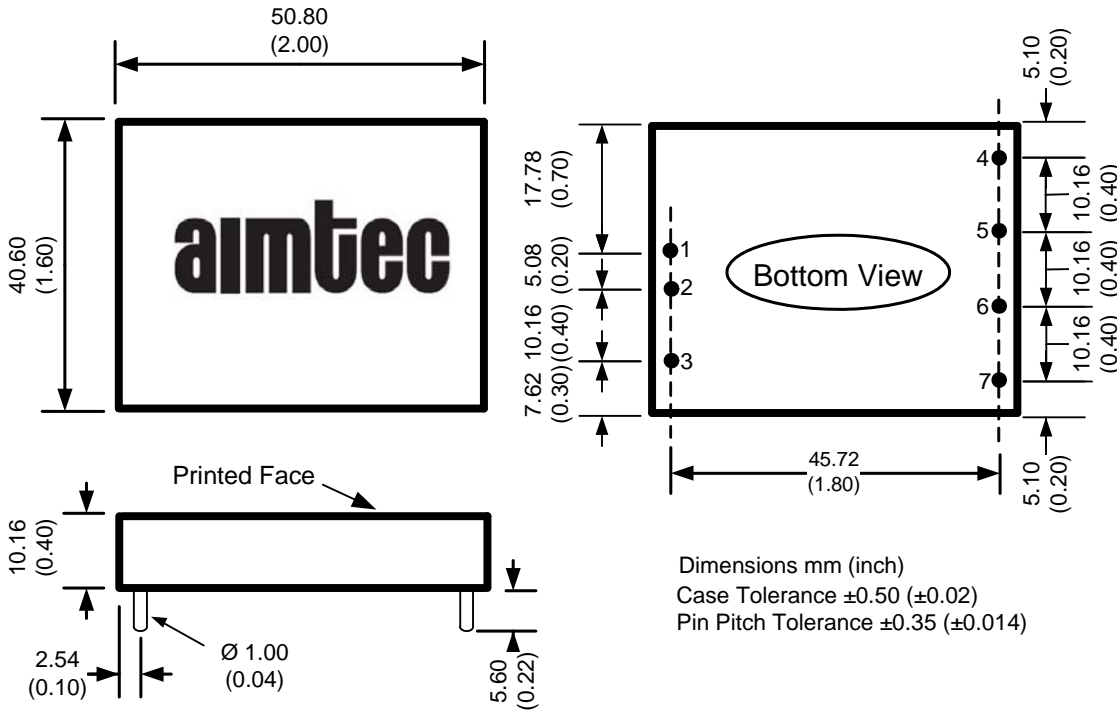
Safety Specifications

Parameters	
Agency approvals	CE
Standards	EN 55011 (Industrial, scientific and medical radio frequency equipment- radio disturbance)

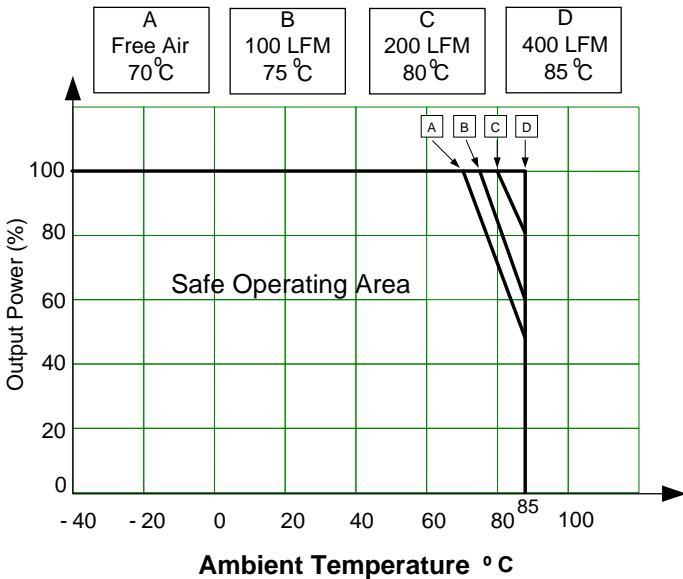
Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	On/OFF Control	On/OFF Control
4	No pin	+V Output
5	+V Output	Common
6	-V Output	-V Output
7	Trim	Trim

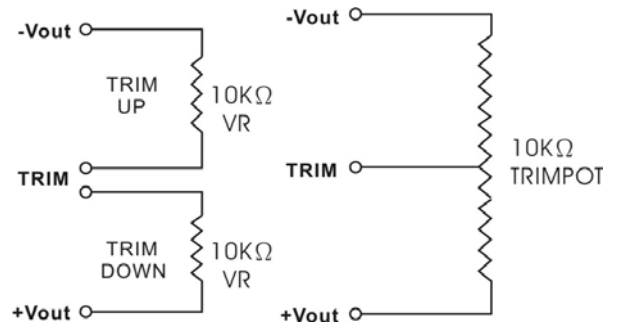
Dimensions



Derating



Trimming



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