



### FEATURES:

- Wide 2:1 Input Range
- 24 Pin DIP Package
- High Efficiency up to 82%
- Metal Package
- Operating Temperature -40°C to +85°C
- Input / Output Isolation 1500 VDC
- Pin Compatible With Multiple Manufacturers
- Continuous Short Circuit Protection



### Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Capacitive Load, Max (µF)	Input Current Full typ.   No Load max. (mA)		Efficiency (%)
AM3T-0505S-RVZ	4.5-9	5	600	2200	857	40	70
AM3T-0507S-RVZ	4.5-9	7.2	417	1000	833	40	72
AM3T-0509S-RVZ	4.5-9	9	333	470	833	40	72
AM3T-0512S-RVZ	4.5-9	12	250	470	810	40	74
AM3T-0515S-RVZ	4.5-9	15	200	470	810	40	74
AM3T-0518S-RVZ	4.5-9	18	167	220	810	40	74
AM3T-0524S-RVZ	4.5-9	24	125	220	857	40	70
AM3T-1205S-RVZ	9-18	5	600	2200	328	20	76
AM3T-1207S-RVZ	9-18	7.2	417	1000	328	20	74
AM3T-1209S-RVZ	9-18	9	333	470	324	20	77
AM3T-1212S-RVZ	9-18	12	250	470	316	20	79
AM3T-1215S-RVZ	9-18	15	200	470	316	20	79
AM3T-1218S-RVZ	9-18	18	167	220	316	20	79
AM3T-1224S-RVZ	9-18	24	125	220	316	20	79
AM3T-2405S-RVZ	18-36	5	600	2200	156	12	80
AM3T-2407S-RVZ	18-36	7.2	417	1000	162	12	77
AM3T-2409S-RVZ	18-36	9	333	470	156	12	80
AM3T-2412S-RVZ	18-36	12	250	470	152	12	82
AM3T-2415S-RVZ	18-36	15	200	470	152	12	82
AM3T-2418S-RVZ	18-36	18	167	220	158	12	79
AM3T-2424S-RVZ	18-36	24	125	220	156	12	80
AM3T-4805S-RVZ	36-72	5	600	2200	81	8	77
AM3T-4807S-RVZ	36-72	7.2	417	1000	80	8	78
AM3T-4809S-RVZ	36-72	9	333	470	80	8	78
AM3T-4812S-RVZ	36-72	12	250	470	78	8	80
AM3T-4815S-RVZ	36-72	15	200	470	78	8	80
AM3T-4818S-RVZ	36-72	18	167	220	81	8	77
AM3T-4824S-RVZ	36-72	24	125	220	78	8	80

### Models Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Capacitive Load, Max (µF)	Input Current Full typ.   No Load max. (mA)		Efficiency (%)
AM3T-0505D-RVZ	4.5-9	±5	±300	±1000	869	40	69
AM3T-0507D-RVZ	4.5-9	±7.2	±208	±220	896	40	67
AM3T-0509D-RVZ	4.5-9	±9	±167	±220	857	40	70
AM3T-0512D-RVZ	4.5-9	±12	±125	±220	833	40	72
AM3T-0515D-RVZ	4.5-9	±15	±100	±220	810	40	74
AM3T-0518D-RVZ	4.5-9	±18	±83	±220	810	40	74
AM3T-0524D-RVZ	4.5-9	±24	±63	±100	857	40	70

**Models**

**Dual output (continued)**

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Capacitive Load, Max (µF)	Input Current Full typ.   No Load max. (mA)		Efficiency (%)
AM3T-1205D-RVZ	9-18	±5	±300	±1000	329	20	76
AM3T-1207D-RVZ	9-18	±7.2	±208	±220	325	20	77
AM3T-1209D-RVZ	9-18	±9	±167	±220	325	20	77
AM3T-1212D-RVZ	9-18	±12	±125	±220	316	20	79
AM3T-1215D-RVZ	9-18	±15	±100	±220	316	20	79
AM3T-1218D-RVZ	9-18	±18	±83	±220	321	20	78
AM3T-1224D-RVZ	9-18	±24	±63	±100	316	20	79
AM3T-2405D-RVZ	18-36	±5	±300	±1000	156	12	80
AM3T-2407D-RVZ	18-36	±7.2	±208	±220	160	12	78
AM3T-2409D-RVZ	18-36	±9	±167	±220	158	12	80
AM3T-2412D-RVZ	18-36	±12	±125	±220	152	12	82
AM3T-2415D-RVZ	18-36	±15	±100	±220	152	12	82
AM3T-2418D-RVZ	18-36	±18	±83	±220	156	12	80
AM3T-2424D-RVZ	18-36	±24	±63	±100	156	12	80
AM3T-4805D-RVZ	36-72	±5	±300	±1000	80	8	78
AM3T-4807D-RVZ	36-72	±7.2	±208	±220	80	8	78
AM3T-4809D-RVZ	36-72	±9	±167	±220	79	8	79
AM3T-4812D-RVZ	36-72	±12	±125	±220	78	8	80
AM3T-4815D-RVZ	36-72	±15	±100	±220	78	8	80
AM3T-4818D-RVZ	36-72	±18	±83	±220	80	8	78
AM3T-4824D-RVZ	36-72	±24	±63	±100	78	8	80

**Input Specifications**

Parameters	Nominal	Typical	Maximum	Units
Voltage range	5	4.5-9		VDC
	12	9-18		VDC
	24	18-36		VDC
	48	36-72		VDC
Filter	π (Pi) Network			
Absolute Maximum Rating	5 Vin	-0.7-15		VDC
	12 Vin	-0.7-24		VDC
	24 Vin	-0.7-40		VDC
	48 Vin	-0.7-80		VDC
Peak Input Voltage time		100		ms
Input Reflected Ripple Current *		35		mA p-p

\* The input reflected ripple current should be measured with a 12µH inductor.

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1500	VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy			±1	%
Short circuit protection	Continuous			
Short circuit restart	Auto Recovery			
Line voltage regulation			±0.5	%
Load voltage regulation			±0.5	%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	At 20MHz Bandwidth		60	mV p-p
Minimum load current *		25		%

\* Operating the converter below the minimum load current will not damage the converter. However, some of the specifications may not be meet.

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100-400		KHz
Operating temperature	Full Load (see derating chart)	-40 to +85		°C
Storage temperature		-40 to +125		°C
Max Case temperature			100	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Nickel coated copper			
Weight		17		g
Dimensions (L x W x H)	1.25 x 0.8 x 0.4 inches 31.75 x 20.32 x 10.2 mm			
MTBF	>1,000,000 hrs (MIL-HDBK -217F, Ground Benign, t <sub>a</sub> +25°C)			

### Safety Specifications

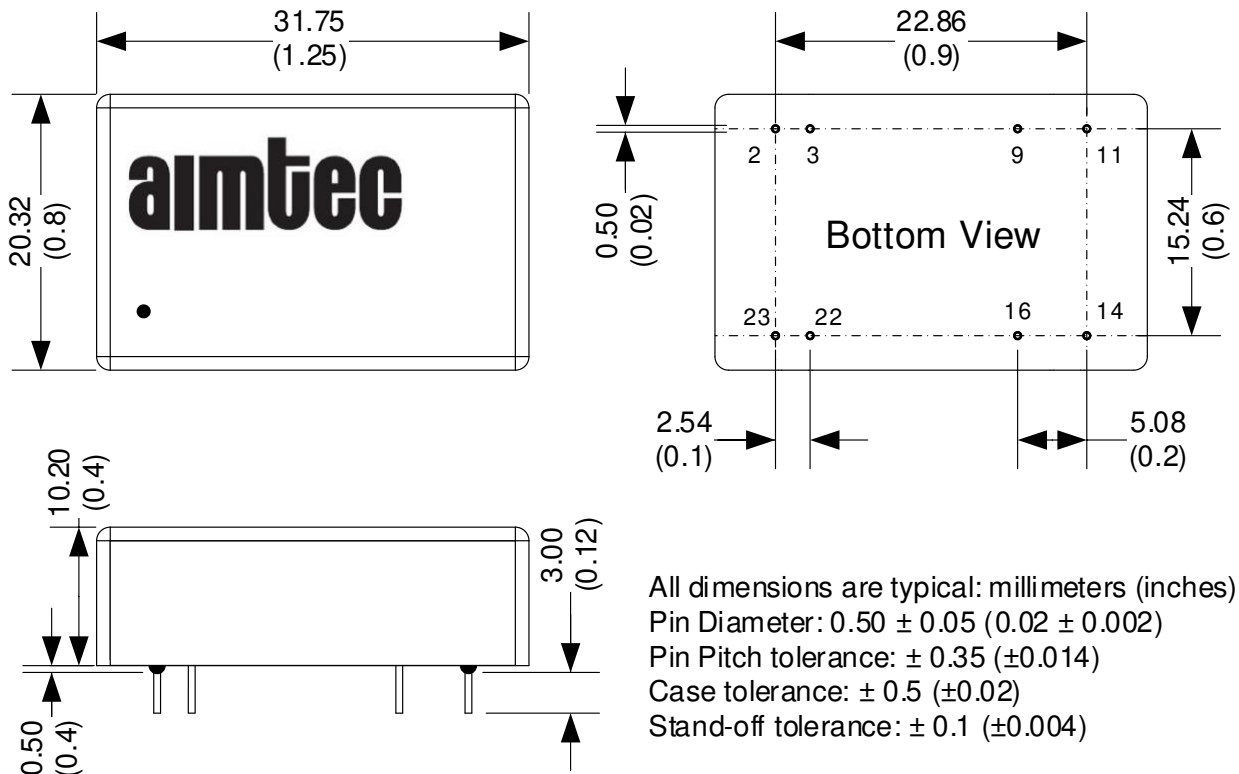
Parameters	
Standards	Designed to meet IEC 60950-1

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.

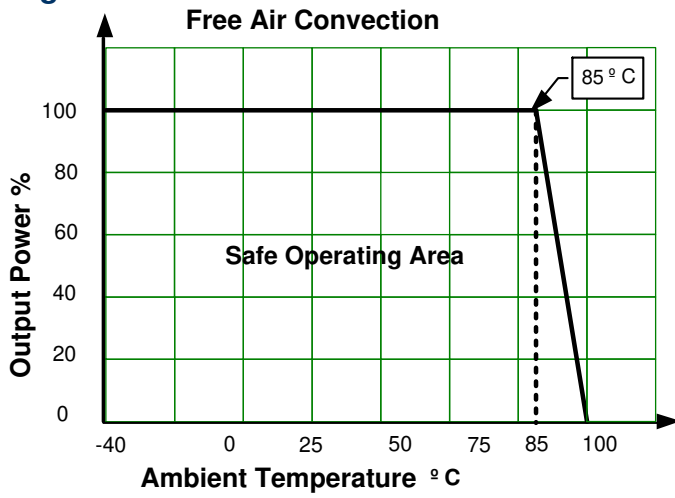
### Pin Out Specifications

Pin	1500 VDC	
	Single	Dual
2	-V Input	-V Input
3	-V Input	-V Input
9	No pin	Common
11	N.C.	-V Output
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

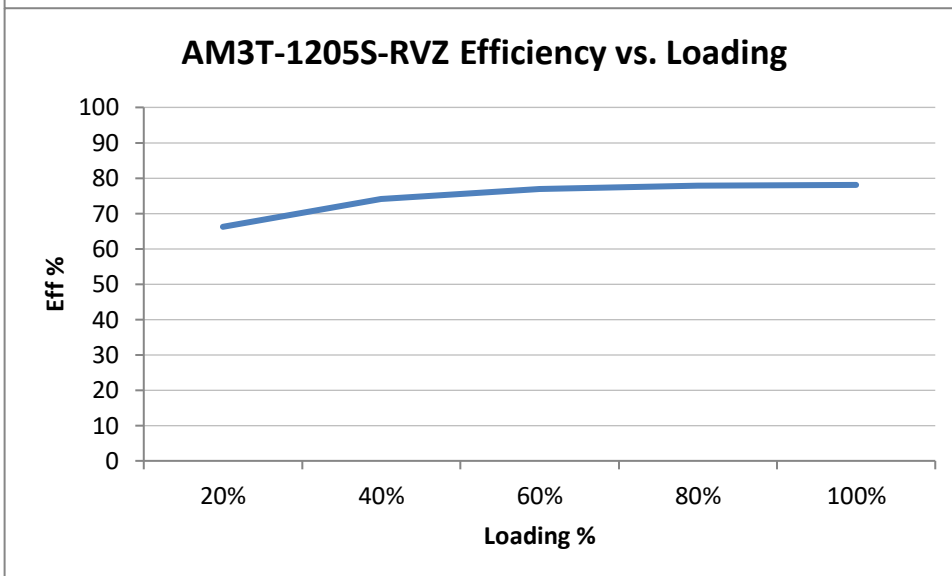
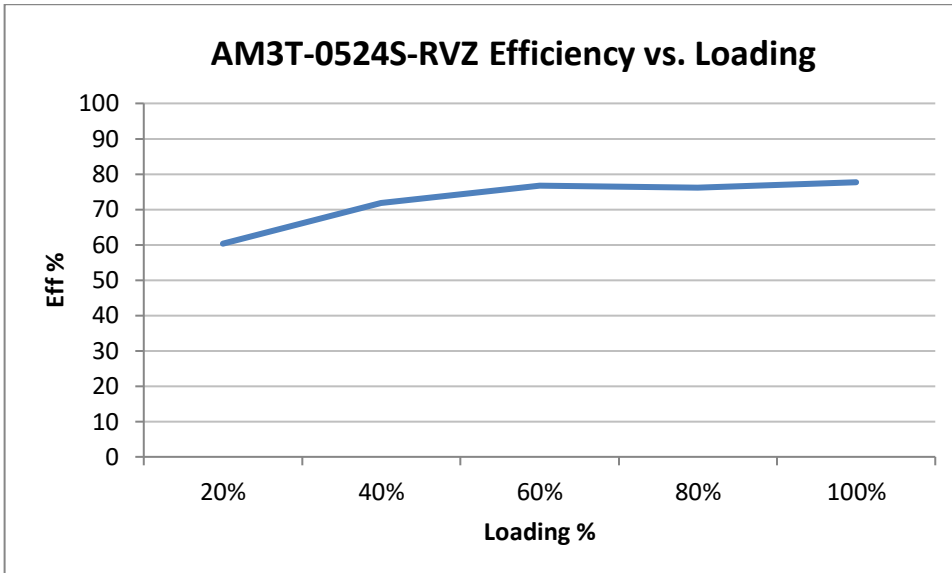
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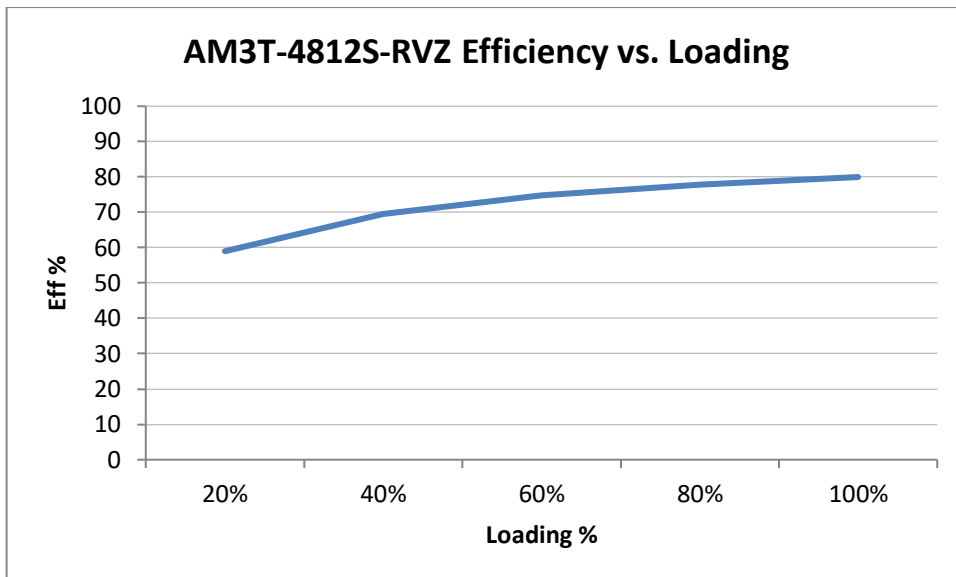
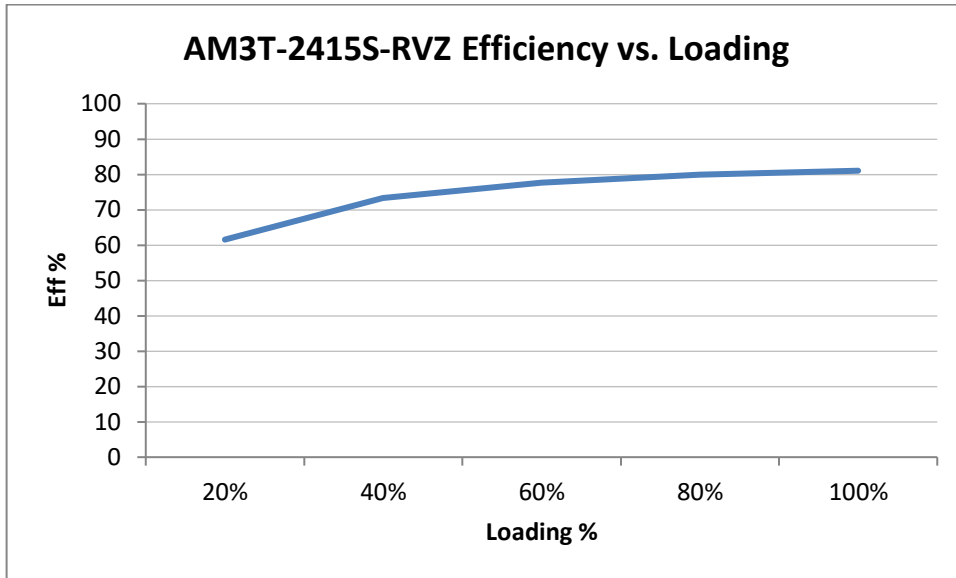


**Derating**



**Typical Efficiency Chart Examples**





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