

FEATURES:

- RoHS Compliant
- 3 Pin SIP Package
- Non-Isolated
- Low ripple and noise
- Operating temperature -40°C to +85
- Very high efficiency up to 97%
- Pin compatible to multiple manufacturers

Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Maximum Capacitive load (µF)	Efficiency Vin Min (%)	Efficiency Vin Max (%)
AMSR-781.5Z	4.75-30	1.5	500	220	78	65
AMSR-781.8Z	4.75-34	1.8	500	220	82	70
AMSR-782.5Z	4.75-34	2.5	500	220	87	76
AMSR-783.3Z	4.75-34	3.3	500	220	91	81
AMSR-7805Z	6.5-34	5	500	220	94	85
AMSR-786.5Z	8-34	6.5	500	220	95	88
AMSR-787.2Z	9-34	7.2	500	220	95	89
AMSR-7809Z	11-34	9	500	220	96	92
AMSR-7812Z	15-34	12	500	220	97	94
AMSR-7815Z	18-34	15	500	220	97	95

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range		4.75-34		
Filter		Capacitor		
No load Input Current			8	mA
Input Reflected Ripple Current			35	mA p-p
Absolute Maximum		Stress rating	-0.3-34	VDC

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy			±2	%
Short Circuit protection		Auto recovery		
Line voltage regulation			±0.5	%
Load voltage regulation	10-100% load		±0.6	%
Temperature coefficient			±0.02	%/°C
Ripple & Noise	20MHz Bandwidth		60	mV p-p

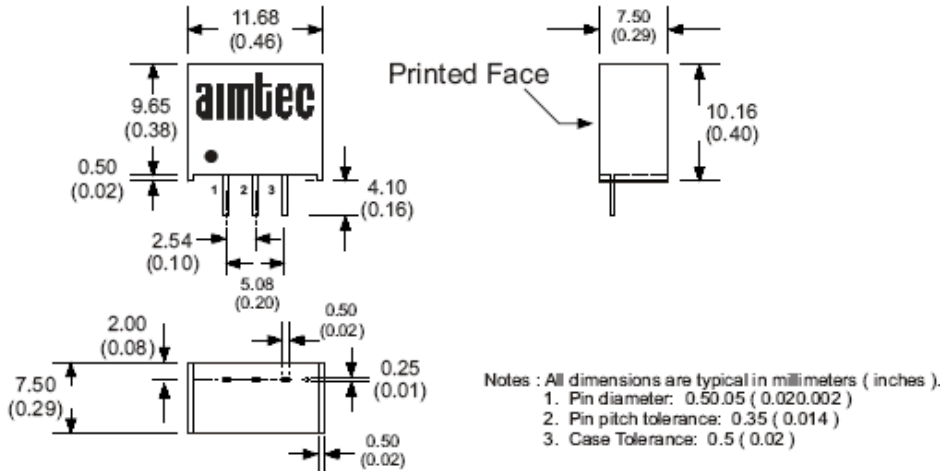
General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	330		KHz
Operating temperature	Without derating	-40 to +85		°C
Storage temperature		-40 to +125		°C
Case temperature			100	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Non-conductive black plastic (UL94V-0 rated)			
Weight		1.8		g
Dimensions (L x H x W)		0.46 x 0.38 x 0.29 inches	11.68 x 9.65 x 7.50 mm	
MTBF	> 1 121 000 hrs (MIL-HDBK-217F, Ground Benign, t=+25°C)			

Pin Out Specifications

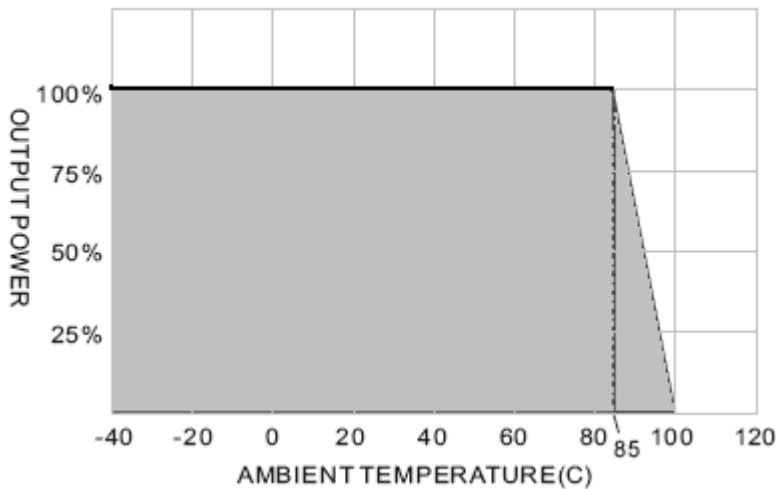
Pin	Single
1	+V Input
2	Ground
3	+V Output

Dimensions



Derating

Derating Curve



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 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 than the ones listed in this datasheet.