

Non-Isolated Single Output Dc-Dc Converter

FEATURES:

3PIN SIP Package

Pin-out compatible with LM78XX Linears

UL94V-0 Package Material

Operating Temperature:-40°C TO +85°C

Efficiency up to 96%,Non isolated,no need for heatsinks

Short circuit protection

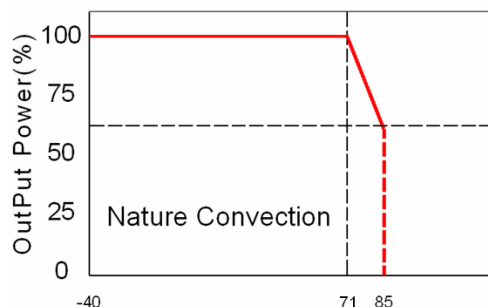
Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified					
Part Number	Input Range	Output Voltage	Output Current	Efficiency	
	Vdc	Vdc	mA	Min.Vin(%)	Max.Vin(%)
AS1000R -1.2UCF	4.6-36	1.2	1000	74	62
AS1000R -1.5UCF	4.6-36	1.5	1000	78	65
AS1000R -1.8UCF	4.6-36	1.8	1000	82	69
AS1000R -2.5UCF	4.6-36	2.5	1000	87	75
AS1000R -3.3UCF	4.75-36	3.3	1000	91	78
AS1000R -5.0UCF	6.5-36	5.0	1000	92	84
AS1000R -6.5UCF	9.0-36	6.5	1000	93	87
AS1000R -9.0UCF	12-36	9.0	1000	95	90
AS1000R -12UCF	15-36	12	1000	95	92
AS1000R -15UCF	18-36	15	1000	96	94

Output Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous, automatic recovery				
Line Regulation	1.2V to 1.5V			0.3	%
Line Regulation	1.8V to 15V			0.3	
Load Regulation	1.2V to 1.5V (10% To 100% F.L)			0.6	%
Load Regulation	1.8 V to 15V (10% To 100% F.L.)			0.4	%
Ripple & Noise (without Output Capacitor)	1.2V to 6.5V(BW=DC To 20MHz)			50	mVp-p
	9V to 15V(BW=DC To 20MHz)			75	mVp-p
Transient response setting time	50% load step change		250		us
Capacitive load				470	uF

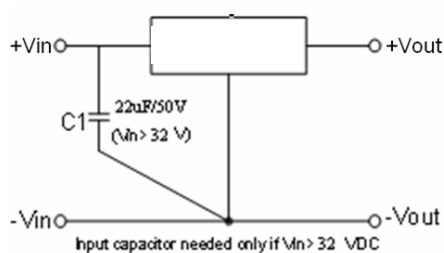
General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency			500		KHz
Operating Temperature		-40		85	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Non-Conductive Black Plastic				
Weight			2.0		g
Dimensions			11.5x7.5x10.0		mm
MTBF(+25°C)	using MIL-HDBK 217F		5000x10 ³		hours
MTBF(+71°C)	using MIL-HDBK 217F		1000x10 ³		hours

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Temperature Derating Graph



Application Examples

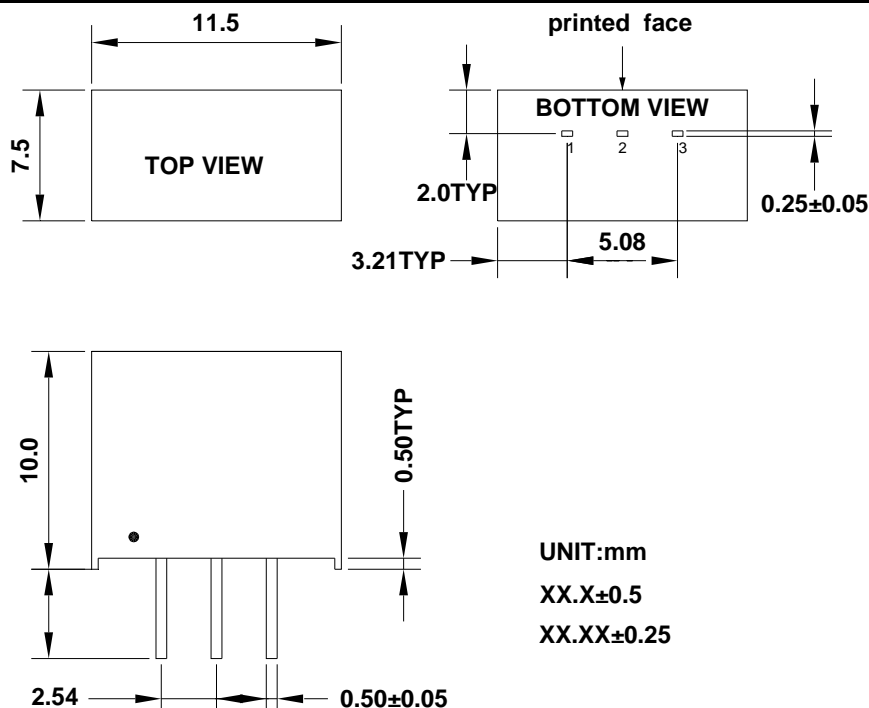


Part Number

AS1000 R - 1.5 T C F
1 2 3 4 5 6

- 1:Series
- 2:Regulated
- 3:Output Voltage
- 4:Case
- 5:Short Circuit Protection Continuous
- 6:Efficiency up to 96%

Markings and Dimensions



PIN Connection

PIN	1	2	3
SINGLE	+Vin	GND	+Vout