

Non-Isolated Single Output Dc-Dc Converter

FEATURES:

3PIN SIP Package

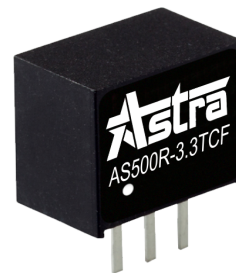
Pin-out compatible with LM78XX Linears

UL94V-0 Package Material

Operating Temperature:-40°C TO +85°C

Efficiency up to 97%,Non isolated,no need for heatsinks

Short circuit protection, Thermal shutdown



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(%)
AS500R-1.5TCF	4.75-30	1.5	500	73	63
AS500R-1.8TCF	4.75-34	1.8	500	82	71
AS500R-2.5TCF	4.75-34	2.5	500	87	77
AS500R-3.3TCF	4.75-34	3.3	500	91	81
AS500R-05TCF	6.5-34	5.0	500	94	86
AS500R-6.5TCF	8.0-34	6.5	500	95	88
AS500R-9.0TCF	11-34	9.0	500	96	92
AS500R-12TCF	15-34	12	500	97	94
AS500R-15TCF	18-34	15	500	97	95

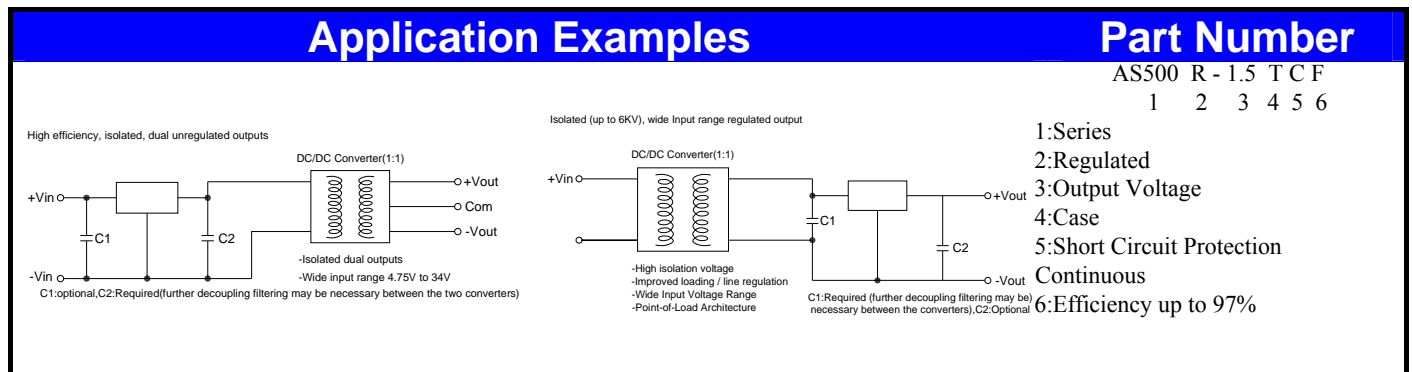
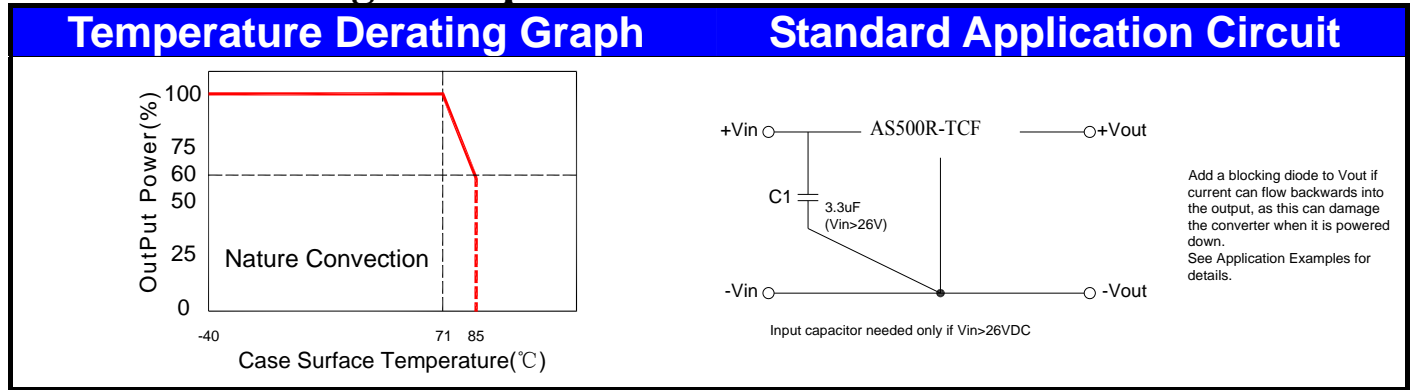
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±3	%
Short Circuit Protection	Continuous				
Line Regulation	1.5V to 6.5V		0.2	0.4	%
Line Regulation	9V to 15.5V		0.1	0.2	
Load Regulation	1.5V to 6.5V (10% To 100% F.L.)		0.4	0.6	%
Load Regulation	9V to 15.5V (10% To 100% F.L.)		0.25	0.4	%
Ripple & Noise (without Output Capacitor)	1.5V to 6.5V(BW=DC To 20MHz)		20	30	mVp-p
	9V to 15.5V(BW=DC To 20MHz)		30	40	mVp-p
Transient response setting time	50% load step change		350		us

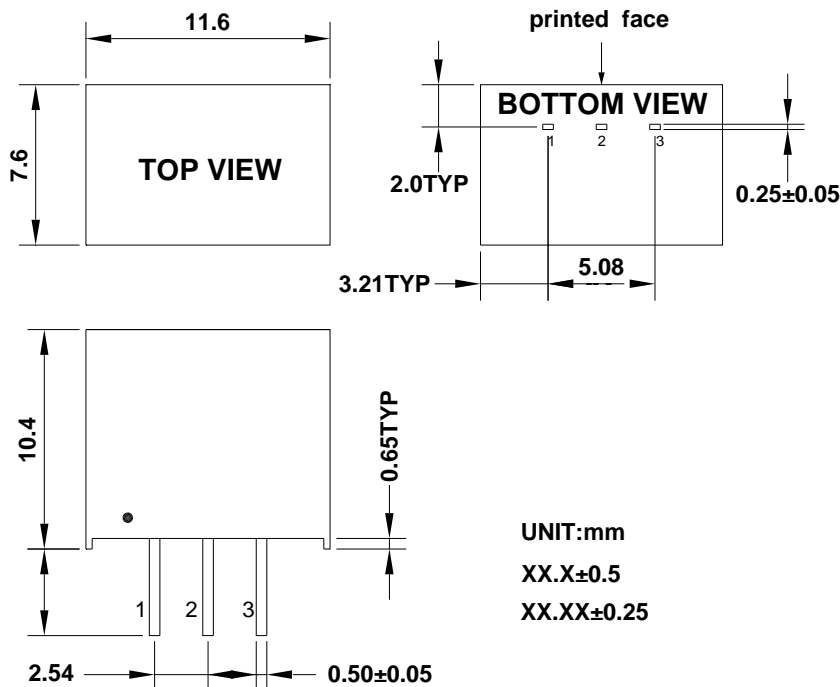
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency			330		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Non-Conductive Black Plastic				
Weight			2.0		g
Dimensions			11.6x7.6x10.4		mm
MTBF(+25°C)	using MIL-HDBK 217F		21098x10 ³		hours
MTBF(+71°C)	using MIL-HDBK 217F		4212x10 ³		hours

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Markings and Dimensions



PIN Connection			
PIN	1	2	3
SINGLE	+Vin	GND	+Vout