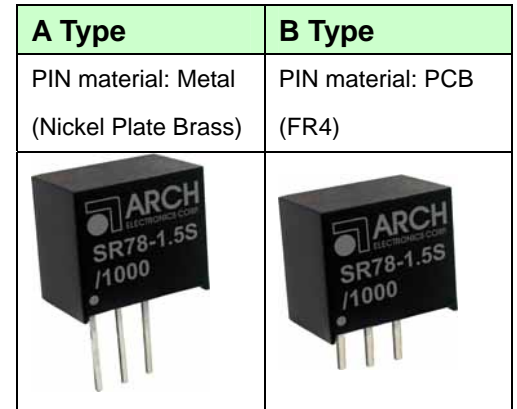


KEY FEATURES

- SIP-Package Fits Existing TO-220 Footprint
- Pin Compatible with LMxx Linear Regulators
- Efficiency up to 96%, Non Isolated, No Need for Heatsinks
- Wide Input Operating (4.6V~36V)
- Non Standard Outputs Available as Specials Between 1.5V~15V
- Short Circuit Protection
- Over-Current Protection & Over-Temperature protection
- UL94V-0 Package Material
- Meet EN55022 Class A Conducted Emissions& Radiated Emissions(Note 3)
- Meet EN55022 Class B Conducted Emissions& Radiated Emissions(Note 4)
- 2 Years Product Warranty



All specifications are typical at nominal input voltage, full load and +25°C otherwise noted .

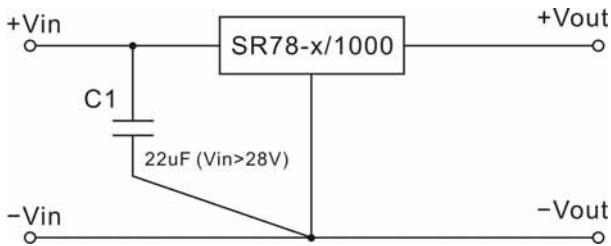
ELECTRICAL SPECIFICATIONS

Model No. (Single Output)	SR78-1.5S/1000	SR78-1.8S/1000	SR78-2.5S/1000	SR78-3.3S/1000	SR78-5S/1000
Max Output Wattage (W)	1.5W	1.8W	2.5W	3.3W	5W
Input Voltage Range (V.DC.)	4.6-36V	4.6-36V	4.6-36V	4.75-36V	6.5-36V
Output Voltage (V.DC.)	1.5V / 1000mA	1.8V / 1000mA	2.5V / 1000mA	3.3V / 1000mA	5.0V / 1000mA
Efficiency(Min. Vin) (typ.)	76%	80%	85%	88%	93%
Efficiency(Max. Vin) (typ.)	66%	71%	76%	80%	85%

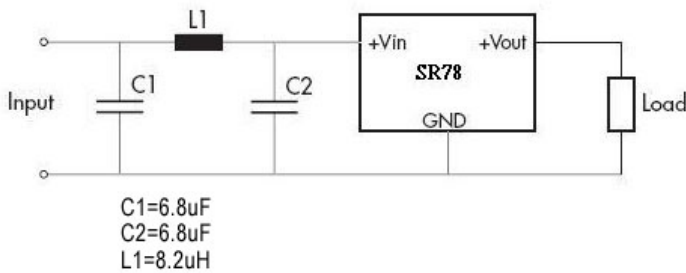
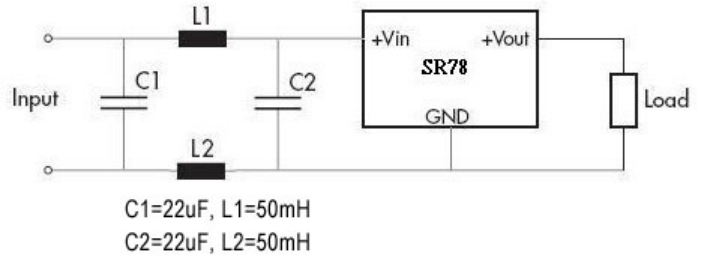
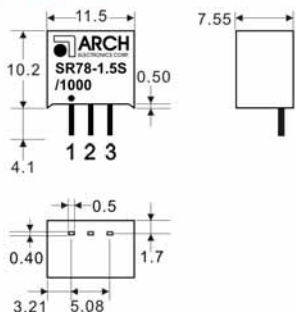
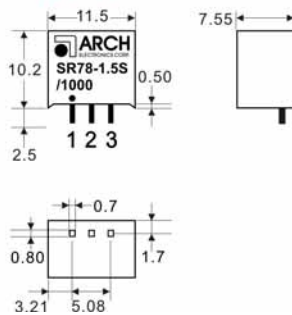
Model No. (Single Output)	SR78-6.5S/1000	SR78-9S/1000	SR78-12S/1000	SR78-15S/1000
Max Output Wattage (W)	6.5W	9W	12W	15W
Input Voltage Range (V.DC.)	8.0-36V	11-36V	15-36V	18-34V
Output Voltage (V.DC.)	6.5V / 1000mA	9.0V / 1000mA	12V / 1000mA	15V / 1000mA
Efficiency(Min. Vin) (typ.)	93%	95%	95%	96%
Efficiency(Max. Vin) (typ.)	87%	90%	92%	93%

Model No. (Single Output)	SR78-1.5 S/1000	SR78-1.8 S/1000	SR78-2.5 S/1000	SR78-3.3 S/1000	SR78-5S /1000	SR78-6.5 S/1000	SR78-9S /1000	SR78-12 S/1000	SR78-15 S/1000			
Max Output Wattage (W)	1.5W	1.8W	2.5W	3.3W	5W	6.5W	9W	12W	15W			
Input	Input Voltage Range (V.DC.)(Note 1)											
	4.6-36V				4.6-36V		4.6-36V		4.75-36V		6.5-36V	
	Nominal input			9 VDC			12 VDC			24 VDC		
Input filter												
C filter												
Output	Voltage (V.DC.)											
	1.5V	1.8V	2.5V	3.3V	5.0V	6.5V	9.0V	12V	15V			
	Voltage Accuracy (at Full Load)											
	±3%											
	Current (mA) (max.)											
	1000											
	Quiescent Current (mA) (max.)											
	1~2 (Vin=min. to max. at 0% Load)											
	Minimum Load (Note 2)											
0%												
Line Regulation (LL-HL) (typ.)												
±0.4% (at full load)												
Load Regulation (10-100%) (typ.)												
±0.8% (Nominal input)												
Ripple&Noise (Nominal Input) (20MHz)					50mV		75mV		100mV	120mV		
Switching Frequency (typ.)												
500KHz												
Capacitor Load (max)												
470uF												
Protection	Current Limit (mA) (max.)											
	2000											
	Short Circuit Protection											
Continuous, auto-recovery												
Thermal Shut Down (typ.)												
+160°C (Internal IC Junction)												
Environment	Operating Temperature											
	-40°C...+85°C (with derating)											
	Storage Temperature											
	-55°C...+125°C											
	Operating Case Temperature											
	+100°C max.											
Case Thermal Impedance (max.)												
70°C / W												
Humidity												
95% RH												
MTBF												
5,358,000 h @ 25°C (MIL-HDBK-217F)												
Physical	Dimension (L x W x H)											
	0.45 x 0.40 x 0.3 Inches (11.5 x 10.2 x 7.55 mm) Tolerance ±0.25 mm											
	Case Material											
Non-conductive black plastic												
Weight												
1.9 g												
EMC	Conducted Emissions											
	EN 55022 Class A(Note3)											
	Radiated Emissions											
	EN 55022 Class A(Note3)											
Conducted Emissions												
EN 55022 Class B(Note4)												
Radiated Emissions												
EN 55022 Class B(Note4)												

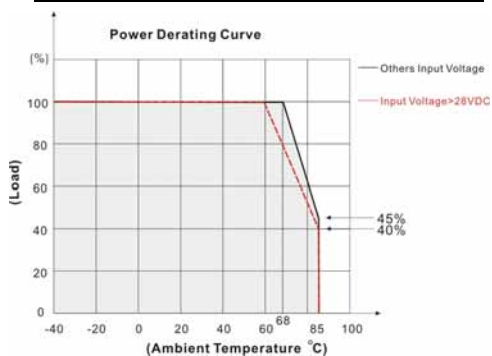
SR78/1000 SERIES
1 A
Note 1:

 Input capacitor needed only if $V_{in} > 28VDC$

Note 2:

- The input voltage minus the output voltage should be greater than 3 VDC, if less, a 3% minimum load is required for proper regulation.
- For SR78-1.5S or SR78-1.8S models, Inputs greater than 28VDC require 3% minimum load for proper regulation.

Note 3:

Note 4:

MECHANICAL DIMENSION (Top View)
A Type (PIN material: Metal)

B Type (PIN material: PCB)


PIN#	Single
1	+VIN
2	GND
3	+VOUT

DERATING
SR78-1.5S 、 5S 、 1.8 S 、 2.5 S 、 3.3S

SR78-6.5S 、 9S 、 12 S 、 15S
