

**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%

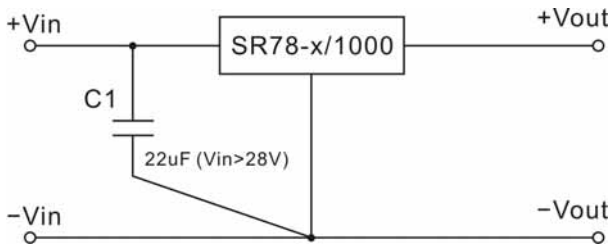
Model No. ( Single Output )	SR78-1.5 S/1000	SR78-1.8 S/1000	SR78-2.5 S/1000	SR78-3.3 S/1000	SR78-5S /1000	SR78-6.5 S/1000	SR78-9S /1000	SR78-12 S/1000	SR78-15 S/1000	
Max Output Wattage (W)	1.5W	1.8W	2.5W	3.3W	5W	6.5W	9W	12W	15W	
Input	Input Voltage Range (V.DC.)(Note 1)									
	Nominal input			12 VDC			24 VDC			
	Input filter									
Output	Voltage (V.DC.)									
	Voltage Accuracy (at Full Load)									
	Current (mA) (max.)									
	Quiescent Current (mA) (max.)									
	Minimum Load (Note 2)									
	Line Regulation (LL-HL) (typ.)									
	Load Regulation (10-100%) (typ.)									
	Ripple&Noise (Nominal Input) (20MHz)									
Protection	Current Limit (mA) (max.)									
	Short Circuit Protection									
	Thermal Shut Down (typ.)									
	Operating Temperature									
Environment	Storage Temperature									
	Operating Case Temperature									
	Case Thermal Impedance (max.)									
	Humidity									
	MTBF									
Physical	Dimension (L x W x H)									
	Case Material									
	Weight									
EMC	Conducted Emissions									
	Radiated Emissions									
	Conducted Emissions									
	Radiated Emissions									

**SR78/1000 SERIES**

**1 A**

**Note 1:**

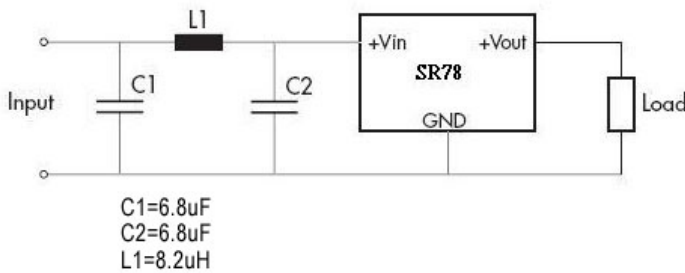
Input capacitor needed only if  $V_{in} > 28VDC$



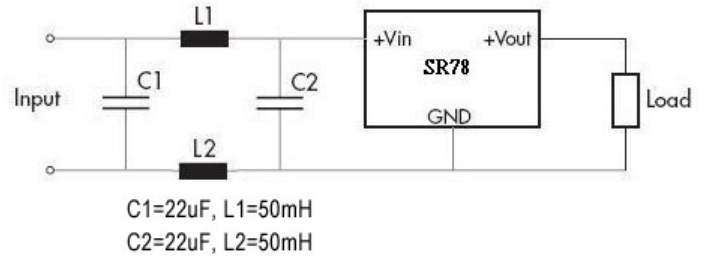
**Note 2:**

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

**Note 3:**

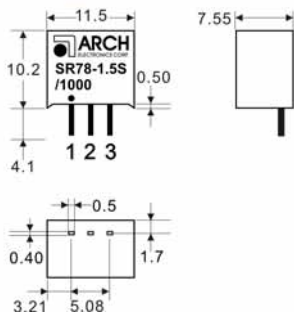


**Note 4:**

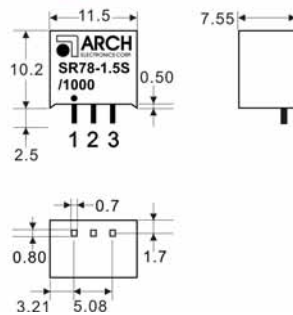


**MECHANICAL DIMENSION ( Top View )**

**TYPE A**



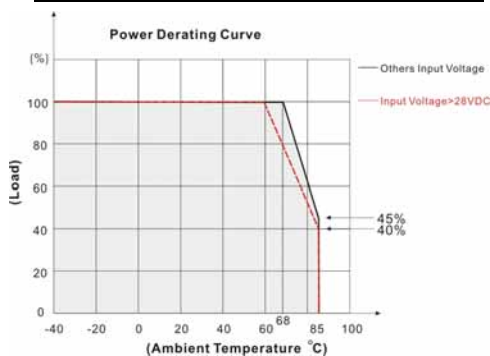
**TYPE B**



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**

