

## DC/DC Converters – SR-78M series

0.5A output current  
Single Output

### FEATURES

- 3 Pin SIL Package
- Non isolation, No need for heatsinks
- Wide Input Range, Step-down switching dc-dc converter
- Full SMD Technology
- Continuous Short Circuit Protection
- Pin-out compatible with LM78Mxx three terminals positive Regulator
- Efficiency up to 97 %
- -40°C ~ 85°C Operation Temperature Range

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
SR-78M1R5	4.75-30	1.5	500	78
SR-78M1R8	4.75-34	1.8	500	82
SR-78M2R5	4.75-34	2.5	500	87
SR-78M3R3	4.75-34	3.3	500	91
SR-78M05	6.5-34	5.0	500	94
SR-78M6R5	8.0-34	6.5	500	95
SR-78M7R2	9.0-34	7.2	500	95
SR-78M09	11-34	9.0	500	96
SR-78M12	15-34	12	500	97
SR-78M15	18-34	15	500	97

#### Input specifications:

Input Reflected Ripple Current Filter: 35mA pk-pk Capacitors

#### Output specifications:

Voltage accuracy ±2%  
Ripple & noise (at 20MHz BW) 60mV pk-pk  
Short Circuit Protection Indefinite  
Line voltage regulation ±0.5%  
Load voltage regulation ±0.8%,load=10~100%  
Temperature coefficient ±0.02%/°C

#### General Specifications:

Efficiency 78% ~ 97%  
Switching Frequency 330 kHz, Typ.

#### Environmental specifications:

Operating Temperature -40°C ~ +85°C  
Case temperature 100°C Max.  
Storage Temperature -40°C ~ +125°C  
Humidity 95% rel H  
Cooling Nature Convection

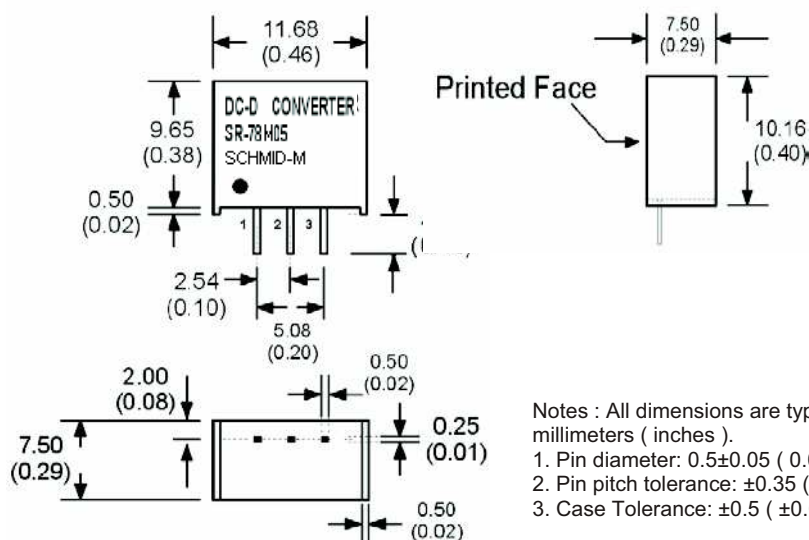
#### Capacitive Load:

220µF

#### Note:

Measured Input reflected ripple current with a simulated source inductance of 12µH.

### MECHANICAL DIMENSIONS & PIN CONNECTIONS



PIN #	Single
1	+V Input
2	GND
3	+V Output

Notes : All dimensions are typical in millimeters ( inches ).

1. Pin diameter:  $0.5 \pm 0.05$  (  $0.02 \pm 0.002$  )
2. Pin pitch tolerance:  $\pm 0.35$  (  $\pm 0.014$  )
3. Case Tolerance:  $\pm 0.5$  (  $\pm 0.02$  )