

# Features

- Low Cost Switching Regulator
- High Startup current capability
- Efficiency up to 92 %
- Short Circuit Protection
- Pin Compatible with 78 Series Regulators
- 3.3V, 5V / 500 mA Output

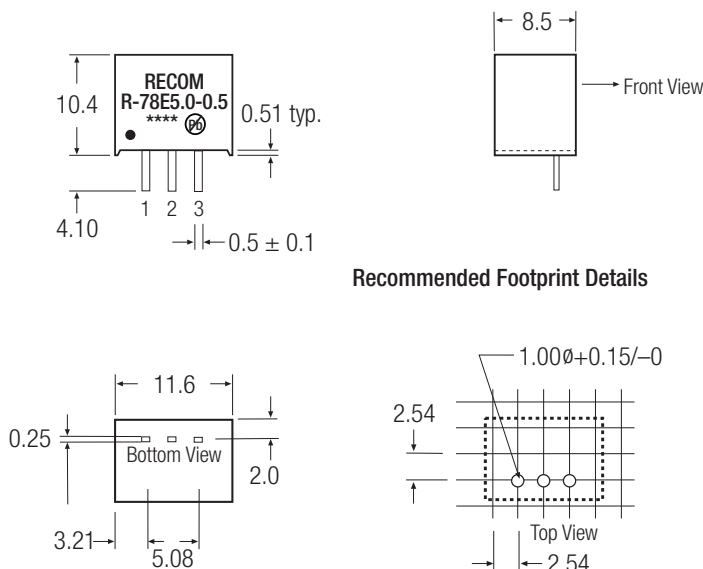
## Selection Guide

Part Number	Input Range (V)	Output Voltage (V)	Output Current (mA)	Efficiency (%)	Max. Capacitive Load
R-78E5.0-0.5	7 - 28	5	500	82 - 92	220µF
R-78E3.3-0.5	6 - 28	3.3	500	75 - 88	220µF

## Specifications (valid at nominal input voltage 24V full load after warm-up time unless otherwise states)

Input Voltage Range	5VDC	7 - 28 VDC
	3.3VDC	6 - 28 VDC
Output Voltage		5.0 VDC
		3.3VDC
Output Current Range		5 - 500 mA
Quiescent Current	Vin = 24V	1.5mA typ.
Output Voltage Accuracy		± 3% max.
Efficiency		see Table
Switching Frequency Vin = 24V		570 KHz typ.
Output Ripple & Noise @ 20MHz	at Vin = 24 VDC, Io = Full Load	50mVp-p max.
Line Voltage Regulation		± 0.5 % max.
Load Voltage Regulation	10% to 100% Full Load	± 1 % max.
Short Circuit Protection		Automatic Restart
Operating Ambient Temperature Range	(see Derating Graph)	-40°C - +85°C
Storage Temperature Range		- 55°C - +125°C
Dimensions (LxWxH)		11.6 x 8.5 x
10.4mm		
Weight		2g
Packing Quantity		42 pcs per tube
Certifications		
IEC/EN General Safety	Report: SPCLVD 1407030-1	IEC/EN-60950-1, 2nd Edition
MTBF (25°C)	MIL-HDBK-217F	4185 x 10 <sup>3</sup> hours
(70°C)	MIL-HDBT-217F	2182 x 10 <sup>3</sup> hours

## Package Style and Pinning (mm)



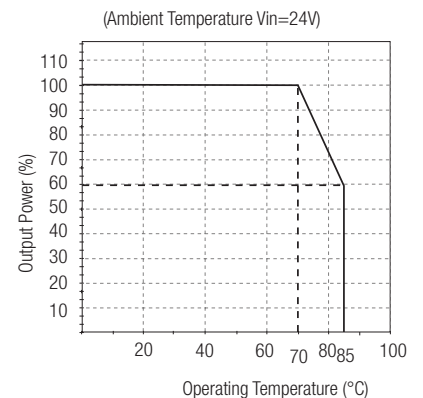
Recommended Footprint Details

### Pin Connections

Pin #	Connection
1	+Vin
2	GND
3	+Vout

xx.x ± 0.5mm  
xx.xx ± 0.25mm

## Derating-Graph (Ambient Temperature)



Refer to Application Notes

# INNOLINE

## DC/DC-Converter

with 3 year Warranty

# RECOM

## 500mA

## Single Output



IEC/EN-60950-1 Certified

# R-78E-0.5