### **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
R-78E3.3-0.5	6 - 28	3.3	500	75 - 88	220µF	

Specifications (valid at nominal input	voltage 24V full load after warm-u	p 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		$\pm$ 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
Packing Quantity		42 pcs per tube
Certifications		
EN General Safety	Report: SPCLVD 1301026-1	EN60950-1:2006 + A12:2011
MTBF (25°C)	MIL-HDBK-217F	4185 x 10 <sup>3</sup> hours
(75°C)	MIL-HDBT-217F	2182 x 10 <sup>3</sup> hours

# **INNOLINE** DC/DC-Converter

with 3 year Warranty



# 500mA Single Output

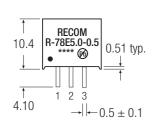


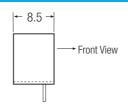


EN-60950-1 Certified

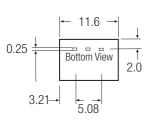
R-78E-0.5

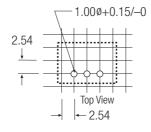
#### Package Style and Pinning (mm)





**Recommended Footprint Details** 





Pin Connections
Pin #
1 +Vin
2 GND

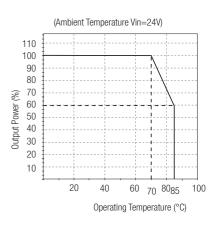
+Vout

 $xx.x \pm 0.5$ mm  $xx.xx \pm 0.25$ mm

3

## **Derating-Graph**

(Ambient Temperature)



**Refer to Application Notes** 

The product information and specifications are subject to change without prior notice. All products are designed for non-safety critical commercial and industrial applications.

The Buyer agrees to implement safeguards that anticipate the consequences of any failures that might cause harm, loss of life and/or damage property.