

Features

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

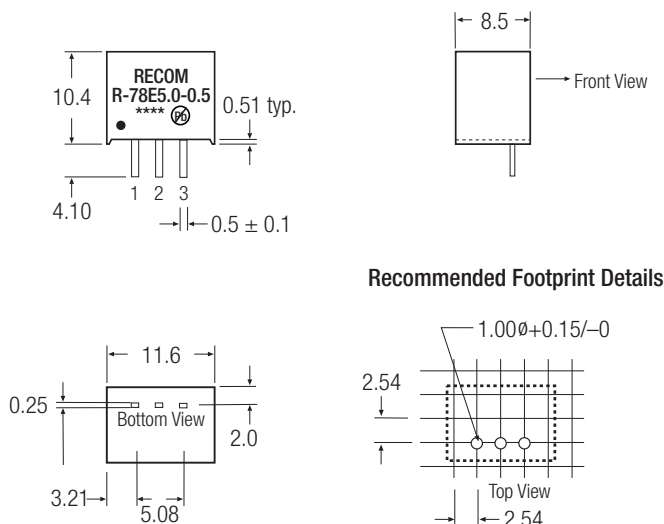
Selection Guide

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

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

Input Voltage Range	5V Version	7 - 28 VDC
	3.3V Version	6 - 28 VDC
Output Voltage		5.0 VDC
		3.3VDC
Output Current Range		5 - 500 mA
Output Voltage Accuracy		± 3% max.
Efficiency		see Table
Switching Frequency $V_{in} = 24V$		570 KHz typ.
Output Ripple & Noise @ 20MHz	at $V_{in} = 24 VDC$, $I_o = \text{Full Load}$	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
Packing Quantity		42 pcs per tube
Thermal Shutdown	Internal IC Junction	+165°C
Output Current Limit	all Series	2300mA min. / 3500mA typ.
(when $V_{in} = 12V$)		
Certifications		
EN General Safety	Report: SPCLVD 1301026-1	EN60950-1:2006 + A12:2011
MTBF (25°C)	MIL-HDBK-217F	4185 x 10 ³ hours
(75°C)	MIL-HDBT-217F	2182 x 10 ³ hours

Package Style and Pinning (mm)



Pin Connections

Pin #	Connection
1	+Vin
2	GND
3	+Vout

xx.x ± 0.5mm
xx.xx ± 0.25mm

INNOLINE
DC/DC-Converter
with 3 year Warranty

RECOM

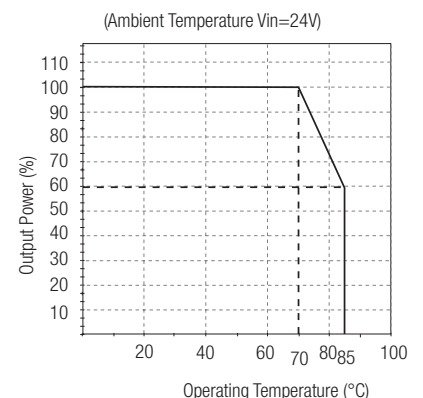
500mA
Single Output



EN-60950-1 Certified

R-78E

Derating-Graph (Ambient Temperature)



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.