

Specifications (measured @ $T_a = 25^\circ\text{C}$, nom. V_{in} , full load and after warm-up unless otherwise stated)

REGULATIONS

Parameter	Condition	Value
Output Accuracy		$\pm 5.0\%$ max.
Line Regulation	low line to high line	$\pm 1.0\%$ max.
Load Regulation ⁽²⁾	10% to 100% load	$\pm 3.0\%$ typ.
Transient Response	100% to 50% load	$\pm 100\text{mV}$
	100% to 10% load	$\pm 200\text{mV}$

Notes:

Note2: Operation below 10% load will not harm the converter, but specifications may not be met

PROTECTIONS

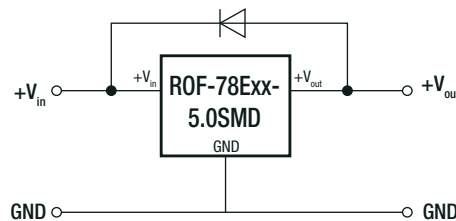
Parameter	Condition	Value
Short Circuit Protection (SCP)		automatic recovery
Short Circuit Input Current		200mA max.
Over Current Protection (OCP)		$>950\text{mA}$ typ. Hiccup mode

Optional Diode Protection Circuit

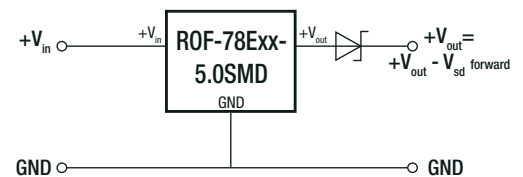
Add a blocking diode to V_{out} if current can flow backwards into the output, as this can damage the converter when it is powered down.

The diode can either be fitted across the device if the source is low impedance or fitted in series with the output (recommended).

Optional Protection 1:



Optional Protection 2:

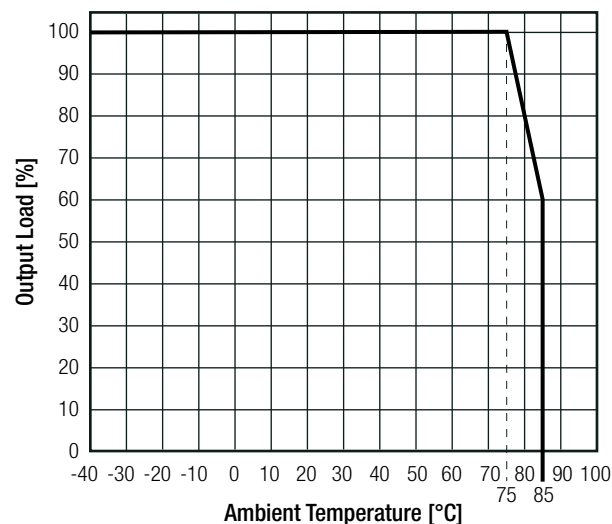


ENVIRONMENTAL

Parameter	Condition	Value
Operating Temperature Range	with derating @ free air convection (see graph)	-40°C to $+85^\circ\text{C}$
Operating Humidity	non-condensing	5% - 95% RH max.
MTBF	according to MIL-HDBK-217F, G.B. $+25^\circ\text{C}$	3500×10^3 hours

Derating Graph

(@ free air convection)



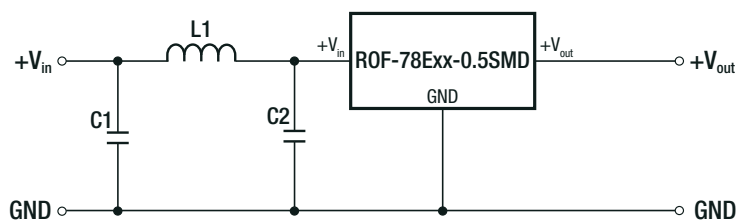
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

SAFETY AND CERTIFICATIONS

Certificate Type (Safety)	Report / File Number	Standard
RoHS 2+		RoHS-2011/65/EU + AM-2015/863
EAC	RU-AT.49.09571	TP TC 004/2011

EMC Compliance	Condition	Standard / Criterion
Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	with external filter	EN55032, Class B

EMC Filtering Suggestion according to EN55032 Class A and Class B



Component List Class A and B

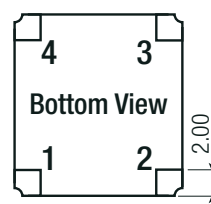
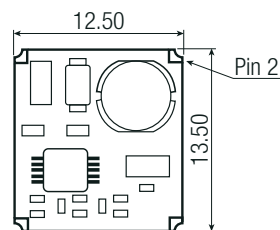
C1	C2	L1
1μF	1μF	33μH

The capacitors used are ceramic capacitors, rated voltage 50V

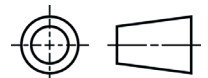
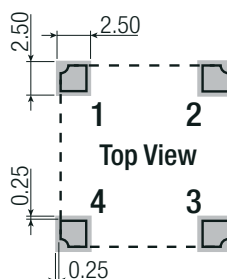
DIMENSION AND PHYSICAL CHARACTERISTICS

Parameter	Type	Value
Material	PCB	FR4, (UL94 V-0)
Package Dimension (LxWxH)		12.5 x 13.5 x 4.0mm
Package Weight		1g typ.

Dimension Drawing (mm)



Recommended Footprint Details



Pin Connections

Pin #	Single
1	+Vin
2	GND
3	+Vout
4	CTRL

Tolerance: xx.xx= ±0.25mm