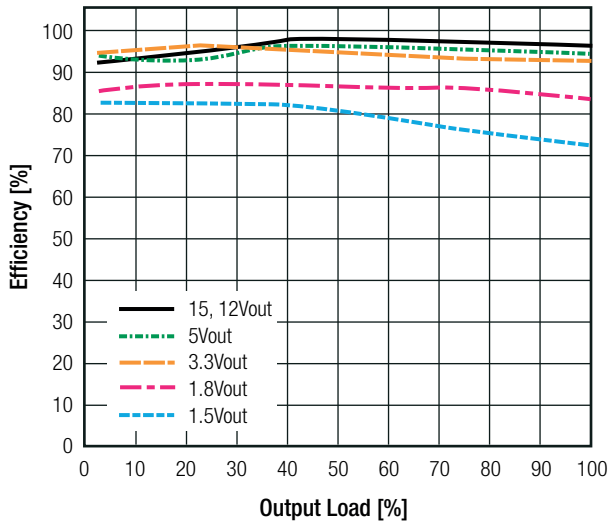
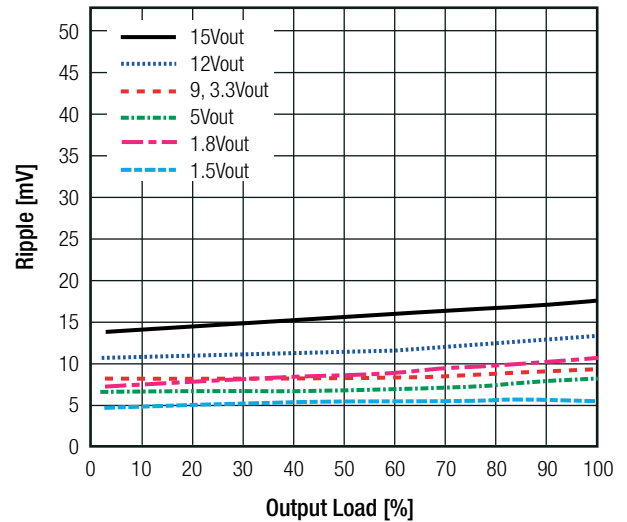


**Specifications** (measured @ Ta= 25°C, 10% minimum load, unless otherwise stated)

Efficiency vs. Load (min. Vin)



Ripple vs. Load (min. Vin)



### REGULATIONS

Parameter	Condition		Value
Output Accuracy	100% load		±2.0% typ / ±3.0% max.
Line Regulation	low line to high line, 100% load	1.5V - 6.5V	±0.2% typ. / ±0.4% max.
		9V - 15.5V	±0.1% typ. / ±0.2% max.
Load Regulation	10% to 100% load	1.5V - 6.5V	±0.4% typ. / ±0.6% max.
		9V - 15.5V	±0.25% typ. / ±0.4% max.
Transient Response <sup>(5)</sup>	100% <-> 50% load		±75mV typ.
	100% <-> 10% load		±100mV max.

**Notes:**

Note5: The R.783.3-0.5 requires Vin>5.5V to meet the Transient Response specifications

### PROTECTIONS

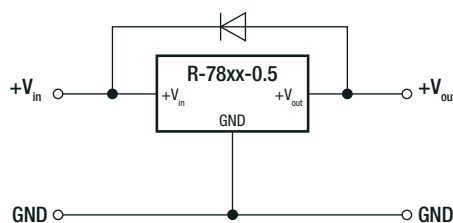
Parameter	Condition	Value
Short Circuit Protection (SCP)		continuous, automatic recovery
Short Circuit Input Current	nom. Vin= 24VDC	60mA max.

### Optional Diode Protection Circuit

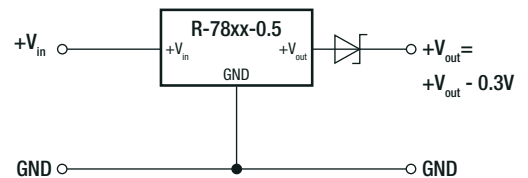
Add a blocking diode to Vout if current can flow backwards into the output, as this can damage the converter when it is powered down.

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:

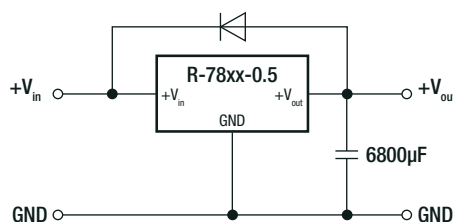


Optional Protection 2:



**Application example:**

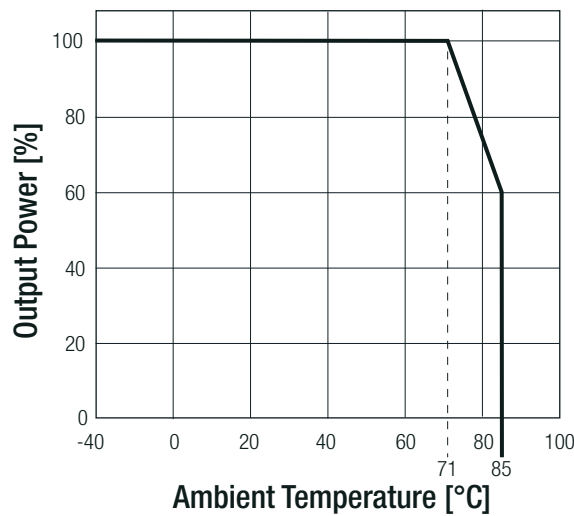
Driving a high capacitive load



**Specifications** (measured @ Ta= 25°C, 10% minimum load, unless otherwise stated)

ENVIRONMENTAL		
Parameter	Condition	Value
Operating Temperature Range	with derating (see graph)	-40°C to +85°C
Maximum Case Temperature		+100°C
Temperature Coefficient		±0.015%/K
Thermal Impedance	0.1 m/s, vertical	70K/W
Operating Altitude		2000m
Operating Humidity	non-condensing	95% RH max.
Pollution Degree		PD2
MTBF	according to MIL-HDBK-217F, G.B.	+25°C 26163 x 10 <sup>3</sup> hours

**Derating Graph**



SAFETY AND CERTIFICATIONS		
Certificate Type (Safety)	Report / File Number	Standard
Information Technology Equipment, General Requirements for Safety	1603123	IEC60950-1:2005, 2nd Edition + Am 2:2013 EN60950-1:2006 + Am 2:2013
EAC	RU-AT.49.09571	TP TC 004/2011
RoHS 2+		RoHS 2011/65/EU + AM2015/863
EMC Compliance	Condition	Standard / Criterion
Electromagnetic compatibility of multimedia equipment - Emission requirements	with external filter (see filter suggestion below)	EN55032, Class A and B
ESD Electrostatic discharge immunity test	Contact ±6kV	EN61000-4-2, Criteria A
Radiated, radio-frequency, electromagnetic field immunity test	3V/m	EN61000-4-3, Criteria A
Fast Transient and Burst Immunity	±1.0kV	EN61000-4-4, Criteria A
Immunity to conducted disturbances, induced by radio-frequency fields	3V	EN61000-4-6, Criteria A
Power Magnetic Field Immunity	50Hz, 3A/m	EN61000-4-8, Criteria A

continued on next page