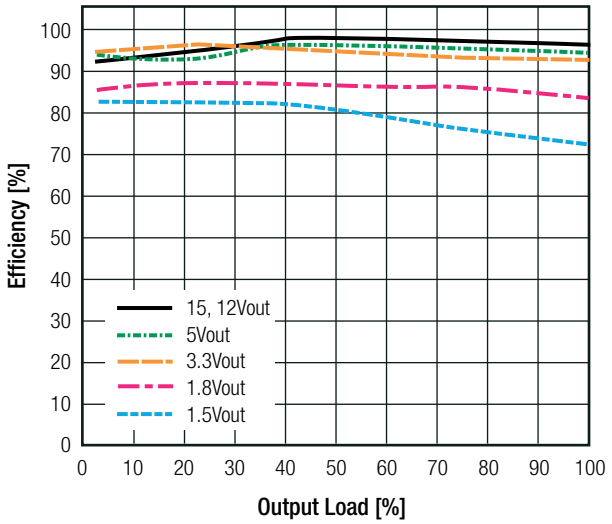
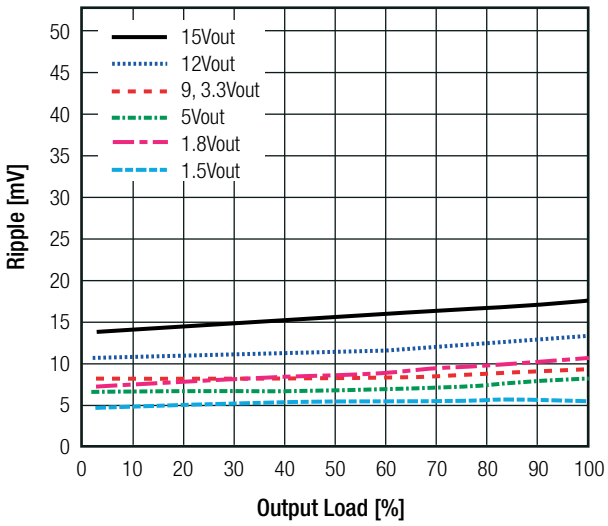
Specifications (measured @ Ta= 25°C, 10% minimum load, unless otherwise stated)

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 9V - 15.5V	±0.2% typ. / ±0.4% max. ±0.1% typ. / ±0.2% max.
Load Regulation	10% to 100% load	1.5V - 6.5V 9V - 15.5V	±0.4% typ. / ±0.6% max. ±0.25% typ. / ±0.4% max.
Transient Response [5]	100% <-> 50% load 100% <-> 10% load		±75mV typ. ±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.

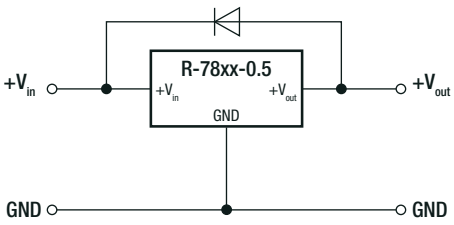
Optional Diode Protection Circuit

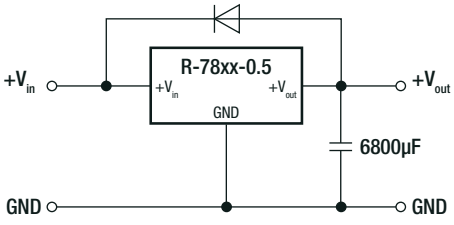
Add a blocking diode to Vout if current can flow backwards into the output, as this can damage the converter when it is powered down.

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

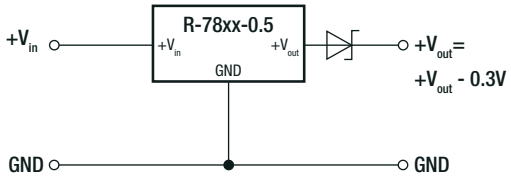
Application example:
Driving a high capacitive load

Optional Protection 1:





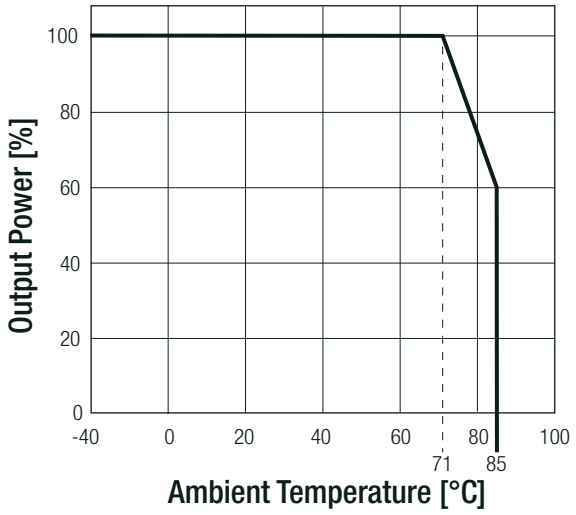
Optional Protection 2:



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	0.1m/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 10^3 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

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