

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

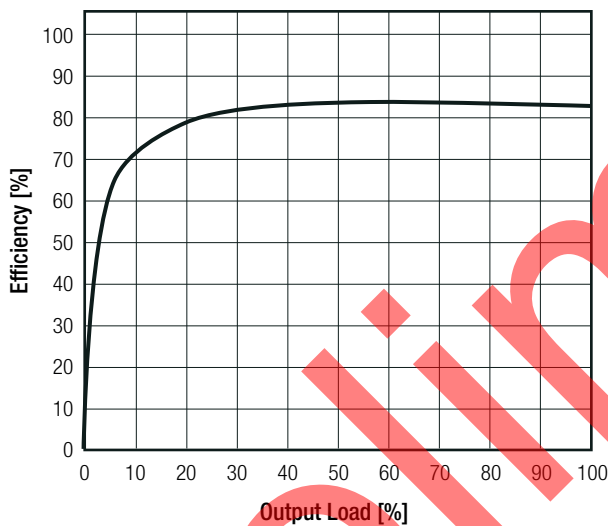
BASIC CHARACTERISTICS

Parameter	Condition	Min.	Typ.	Max.
Internal Input Filter				capacitor
Input Voltage Range	nom. Vin= 24VDC	6.5VDC		72VDC
Input Surge Voltage	100ms max.			100VDC
Quiescent Current			1.5mA	3mA
Under Voltage Lockout	DC-DC ON DC-DC OFF		5.3VDC 5.1VDC	
Minimum Load		0%		
Internal Operating Frequency	nom. Vin= 24VDC		135kHz	
Output Ripple and Noise ⁽³⁾	20MHz BW			150mVp-p

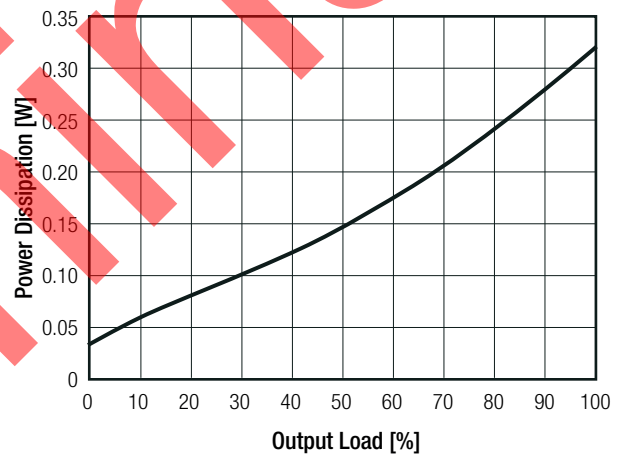
Notes:

Note3: Measurements are made with a 10µF MLCC across output (low ESR)

Efficiency vs. Load



Power Dissipation vs. Load



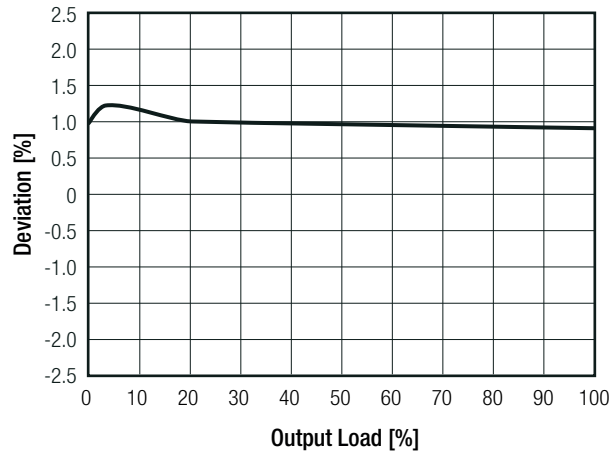
REGULATIONS

Parameter	Condition		Value
Output Accuracy	full load		±1.0% typ. / ±2.5% max.
Line Regulation	low line to high line, full load	8-72Vin 6.5-72Vin	±1.0% typ. ±1.5% max.
Load Regulation	0% to 100% load		1.0% typ.

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Deviation vs. Load



PROTECTIONS

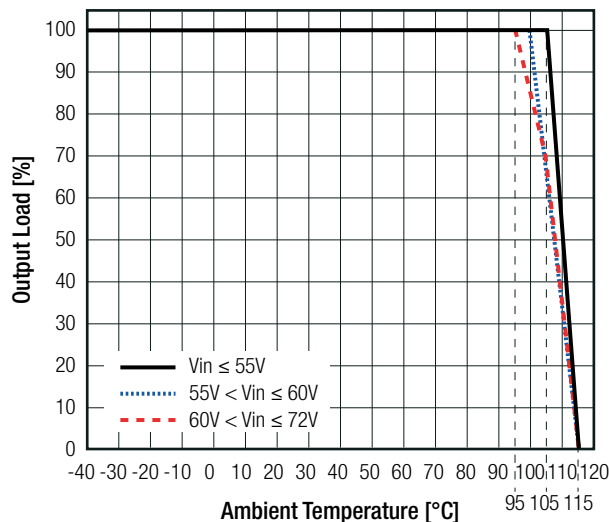
Parameter	Condition	Value
Short Circuit Protection (SCP)	below 100mΩ	continuous, automatic recovery
Over Current Protection (OCP)		hiccup mode, 160% typ.

ENVIRONMENTAL

Parameter	Condition	Value
Operating Temperature Range	@ natural convection 0.1m/s full load, 48Vin refer to derating graph	-40°C to +105°C -40°C to +115°C
Maximum Case Temperature		120°C
Temperature Coefficient		0.02%/K
Thermal Impedance	0.1m/s, horizontal	37K/W
Operating Altitude		2000m
Operating Humidity	non-condensing	5% - 95% RH max.
Pollution Degree		PD2
Shock		according to MIL-STD 202G standard
Vibration		according to MIL-STD 202G standard
MTBF	according to MIL-HDBK-217F, G.B.	+25°C +95°C 15000 x 10 ³ hours 1000 x 10 ³ hours

Derating Graph

(@ Chamber and natural convection 0.1 m/s)



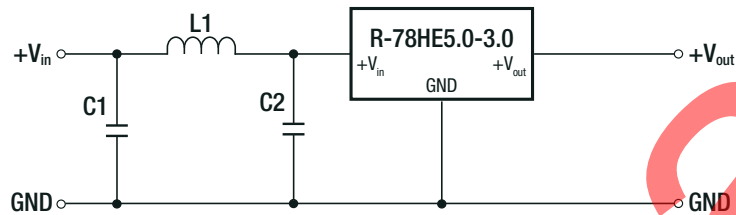
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SAFETY AND CERTIFICATIONS

Certificate Type (Safety)	Report / File Number	Standard
RoHS2		RoHS 2011/65/EU + AM2015/863

EMC Compliance	Condition	Standard / Criterion
Electromagnetic compatibility of multimedia equipment - Emission requirements	with external filter	EN55032, Class A and B

EMC Filter suggestion according to EN55032 Class A and B



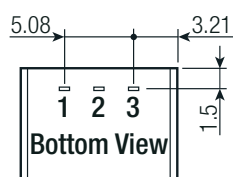
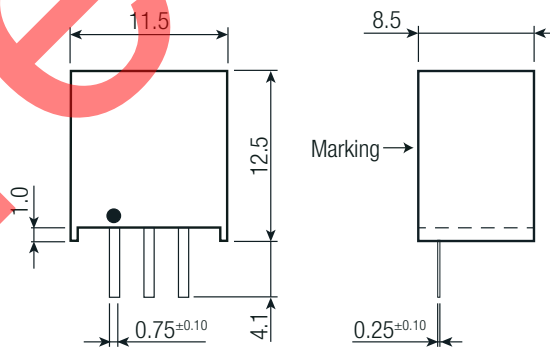
Component List

Level	C1	C2	L1
Class A	2.2µF	-	12µH choke RLS-126
Class B	2.2µF	2.2µF	68µH choke RLS-686

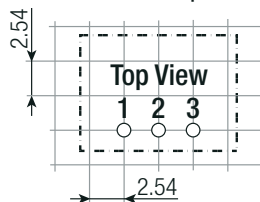
DIMENSION AND PHYSICAL CHARACTERISTICS

Parameter	Type	Value
Material	case potting PCB	non-conductive black plastic, (UL94 V-0) epoxy, (UL94 V-0) FR4, (UL94 V-0)
Dimension (LxWxH)		11.5 x 8.5 x 12.5mm
Weight		2.6g typ.

Dimension Drawing (mm)



Recommended Footprint Details



Pin Connections

Pin #	Function
1	+Vin
2	GND
3	+Vout

Tolerance: xx.x= ±0.50mm
xx.xx= ±0.25mm

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PACKAGING INFORMATION		
Parameter	Type	Value
Packaging Dimension (LxWxH)	tube	530.0 x 10.7 x 23.2mm
Packaging Quantity	tube	42pcs
Storage Temperature Range		-55°C to +125°C
Storage Humidity	non-condensing	95% RH max.

preliminary

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