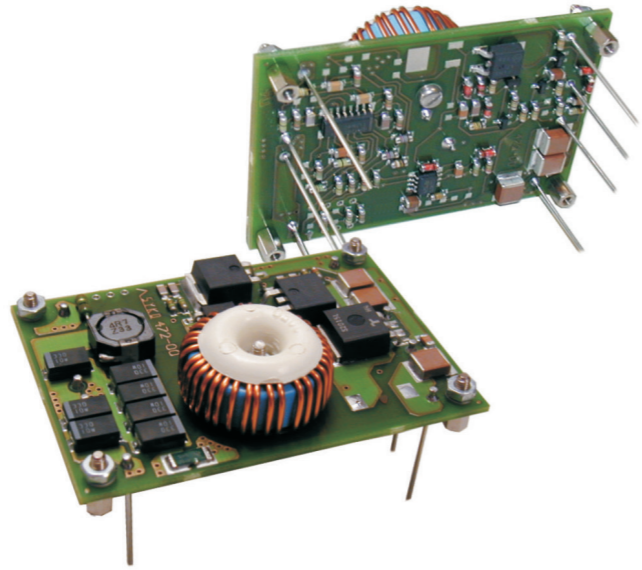


single output
up to 72 Watt

Switching Regulators
without isolation



- PCB-Modul (open)
- Suitable for mobile applications
- Height <20mm / screwable
- Thyristor-over voltage protection
- Very high efficiency
- Long term transient proof
- 100% functional tests of all parameters
- Dyn. / stat. short circuit proof
- No-load stable
- Load-step 0...100% possible



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Series SR.O¹⁾

Main points:

Output:

- Accuracy absolute $\pm 1\%$
- Regulation $\Sigma(U_{in} + I_{out} + T_U) < \pm 1,5\%$
- Ripple <30 mV_{rms} (typ. <10mV_{rms}) constant over TU
- Spikes <50 mV_{rms} (T 1:1/50MHz)
- Response time $\Delta I = 50\% \leq 250\mu s$
- No-load-, static over load- and static short circuit protected
- No-load capable
- Short circuit current $\leq 1,2 I_{out max}$
- Reference 5V $\pm 1,5\%$ / 1mA (REF)

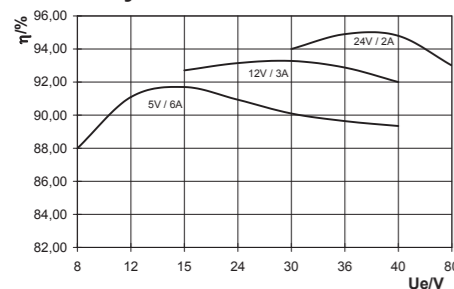
Input:

- No-load power consumption approx. 0,7 Watt
- ON-OFF-control (Inhibit)
- Transient adapted
- $C_E \geq 23\mu F$ recommended
- Simply noise-suppressible
- Option: External set point value (BER)

General:

- Ambient temperature -25...+70°C
Option Version H: -40...+85°C
Derating 1,5%/°C >70°C
- Free air convection
- Common 0V input-output
- MTBF on request
- Open Design
- Dimension 70,5 x 50,5 x 19,5 mm³
- 4 screw-on bolts
- Temperature control

Efficiency:



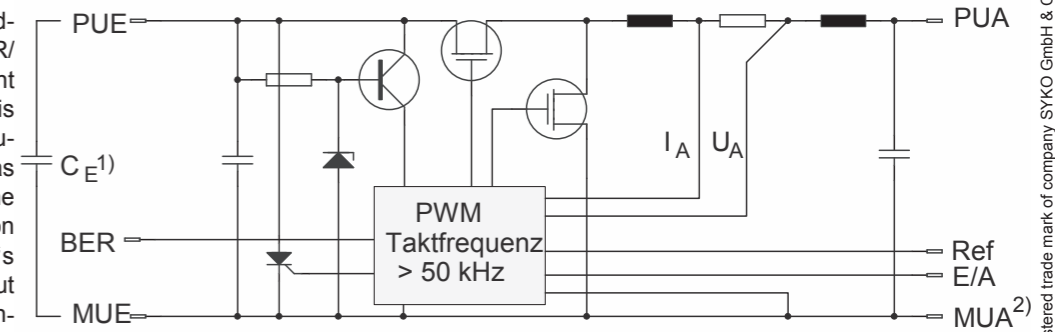
Stand: 05/18

single output
up to 72 Watt

Switching Regulators
without isolation



Switching regulators of the **SR.O** series have been designed in an open, thermal stress-free build-up to replace the old, potted SR/SR.K. The wide and transient adapted input voltage range is ideal for the use on wide fluctuating on-board networks or as supplementary regulators. The output-over voltage protection prevents the output load's damage in the case of a input voltage-breakthrough. The converter switches off by a thermal over load and switches on again after the temperature drops below the limit-temperature. All electrical parameters (voltages, currents, frequencies, efficiency, ripple, spikes etc.) are 100%-tested at all internal points as well as on all customer interface points. The result is that the modules can guarantee a very high quality level, which has been displayed in several thousand applications within our customer's systems. The choice of components and the manufacturing technology lead to the converter's high functional life time and reliable security.

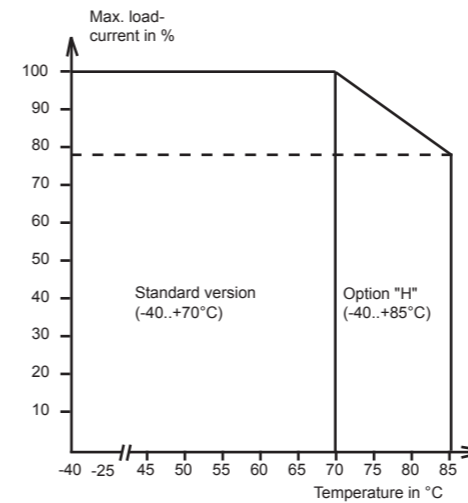


²⁾ Reference all potentials to -Uout

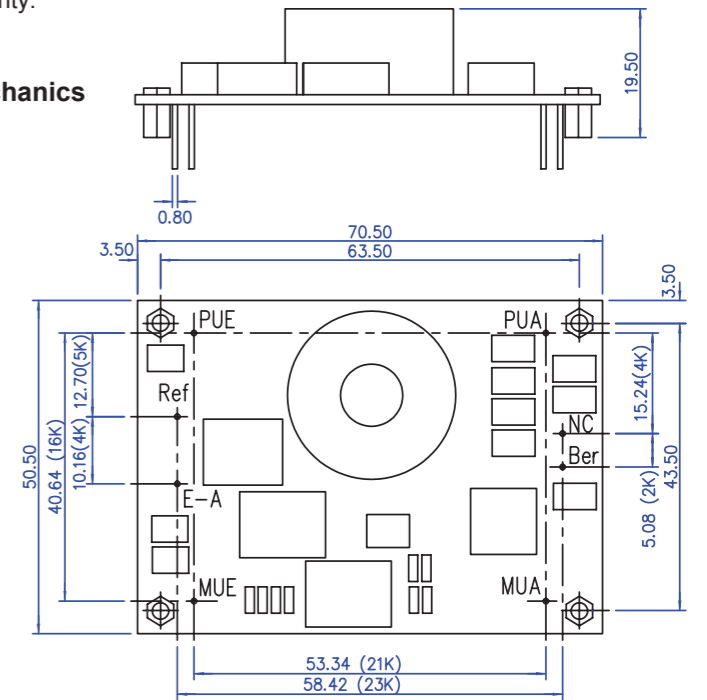
¹⁾ A ceramic or foil capacitor 22µF is recommended

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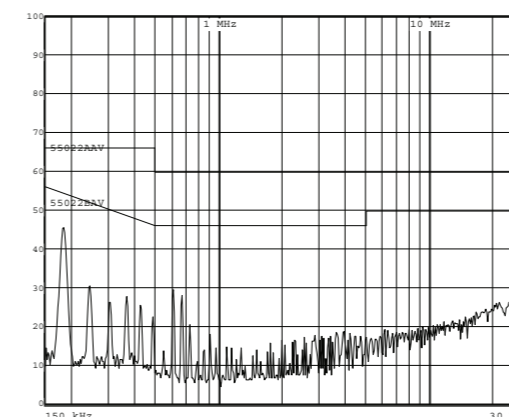
Derating curve



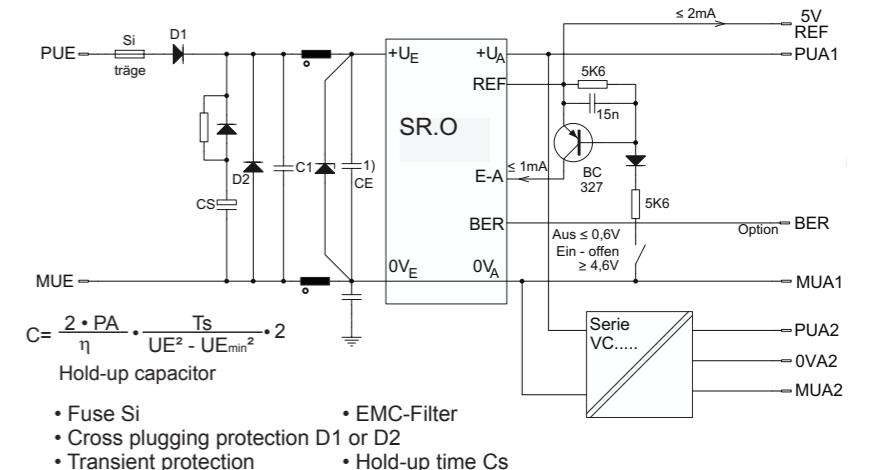
Mechanics



Measurement of radio interference with external application circuit



Application (Noise suppression / multiple outputs)



- Fuse Si
- Cross plugging protection D1 or D2
- Transient protection
- EMC-Filter
- Hold-up time Cs

Application report input circuit and auxiliary outputs on request

Stand: 05/18