micross
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ZBR Series

Redundant DC/DC for Digital Payload

Product Brief

Micross ZBR converter offers state of the art performance and is specifically designed for digital payloads requiring low voltage and high current. The ZBR has excellent power conversion efficiency and is designed for operating in a cold redundant configuration and can be tailored to the specific spacecraft bus and equipment requirements.

RAD-HARD, ITAR FREE
100 kRad and 60 MeV

FEATURES

Electrical Performance

- Remote Sense and Single Point Failure Free for Output Over Voltage
- Output OR-ing and Over Voltage Protection for Redundant Systems
- Input Under Voltage Protection
- Telemetries: ON/OFF Status, Temperature, Input Current, Output Voltage
- ON/OFF Telecommand
- WC EOL Output Voltage Accuracy: ± 2% Including Line and Load
- Load Step Transient Response: ± 5% for a 50% to 100% Load Step

Mechanical

PCB Outline Excl. Connectors		Mass
ZBR (Board):	157mm x 123mm x 26.5mm	< 475g
ZBR (Chassis):	189mm x 30.0mm x 131mm	< 790g

Output CE:

V1: <1.0mVrms (50Hz to 50MHz)

CS Rejection Input to Outputs:

V1: > 40dB

Output Configurations

Output 1: +1V to +10V 50A or 250W

BENEFITS

Standard Form-Factors, Tailored to Spec

- Fully Customizable to Match Satellite Platform and Payload Requirements
- Outputs Can Be Configured to Customer Specifications
- Single Output, Low Voltage, High Power with Option for Remote Sense
- On-Board EMC Filters Ensures Compliance Without Additional Filtering
- Input to Output Power Efficiency of up to 94%
- Design Data Package & Product Control Documentation Available

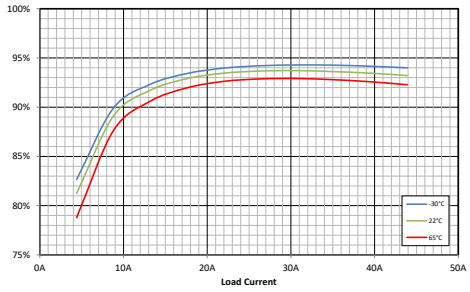
Design Expertise

Our team helps review and specify payload specifics DC-DC converters to ensure maximum compatibility and minimum risk at equipment level. We design, develop, manufacture and test complete DC-DC solutions for effortless payload integration.

Rapid Delivery for Tailored Designs:

- 6 Months for Engineering Models
- 9 Months for CDR Data Package
- 12 Months for Flight Units

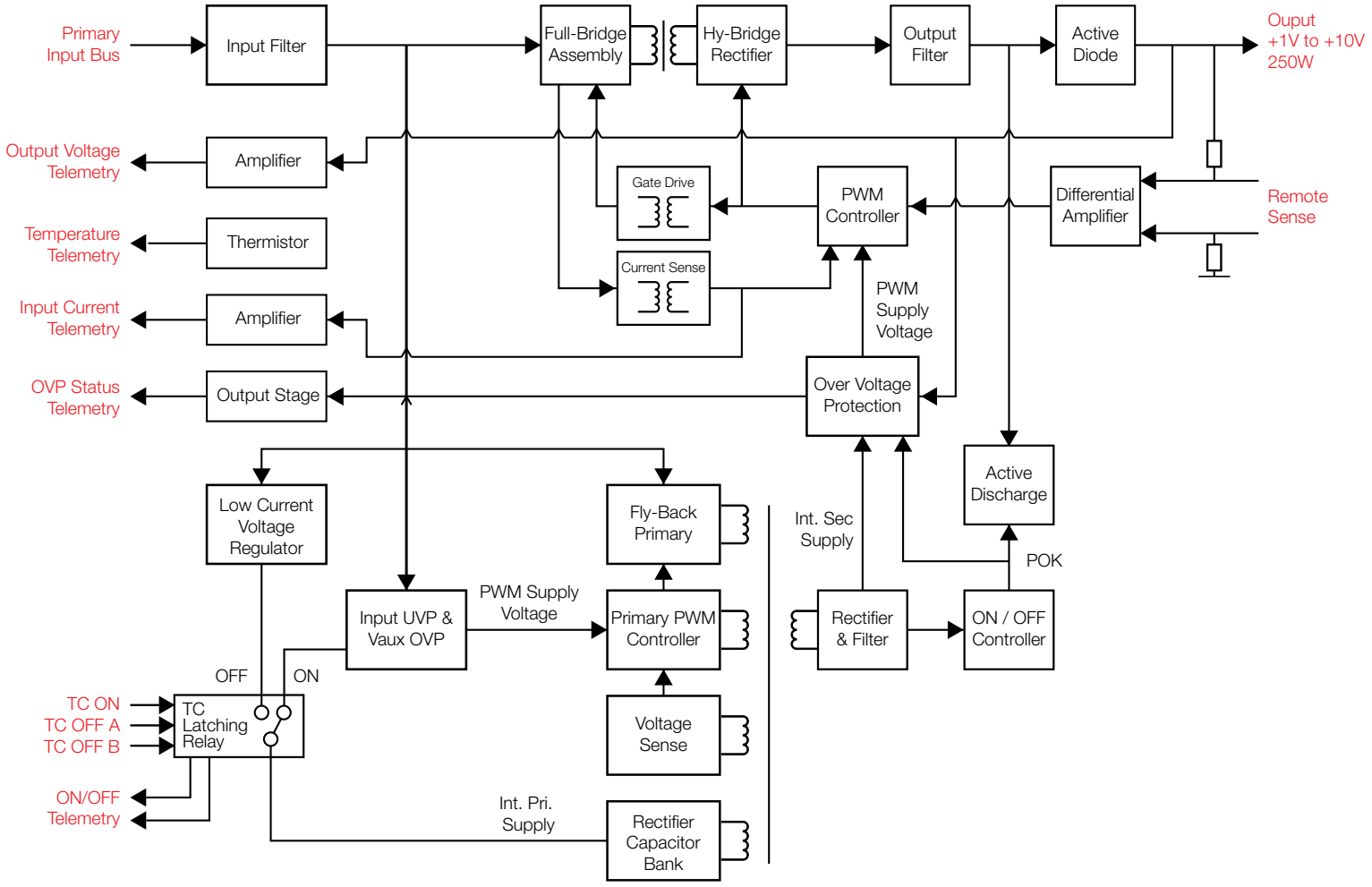
Typical Efficiency



All 4 Outputs Loaded Equal Relative to Max Load

ZBR Series

GENERIC BLOCK SCHEMATIC



Flight Qualified and Export Approved Configurations		
Part Number	Input Voltage	V1
12151	98V - 103V	+5.9V / 45A
12206	98V - 101V	+6.5V / 30A

ECCN: 9A515.y.1

About Micross

Micross is the most complete provider of advanced microelectronic services and component, die and wafer solutions. With the broadest authorized access to die & wafer suppliers, an extensive portfolio of hi-rel power, RF, optoelectronics, memory, data bus, logic, and SMD/5962 qualified products, and the most comprehensive advanced packaging, assembly, modification, upscreening, and test capabilities, Micross is uniquely positioned to provide unparalleled high-reliability solutions, from bare die, to fully packaged devices including hermetic ICs/MCMs, PEMs, ASICs, FPGAs, and PCBs, to complete program life-cycle sustainment. For more than 45 years, Micross has been a trusted source for the aerospace, defense, space, medical, energy, communications, and industrial markets.

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