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EAL Series

Four Output EPC for RF Transmitters

Product Brief

EAL

The EAL series converters offer state-of-the-art performance and are ideal as electronic power conditioner (EPC) for RF amplifiers where high efficiency and low noise is critical. The EAL-series offer a combined output power of 90W and can be tailored to specific spacecraft bus and equipment requirements.

RAD-HARD, ITAR FREE
100 kRad and 60 MeV

FEATURES

Electrical Performance

- Medium Power EPC for RF Applications
- Designed for Noise Sensitive RF Systems
- User Adjustable Voltage for Output 1
- Input Current Telemetry
- Ouput ON/OFF Sequencing
- WC EOL Output Voltage Accuracy: ±2% incl. Line and Load
- Load Step Transient Response: ±5% for a 50% to 100% Load Step

Mechanical

PCB: 142mm x 80mm x 21.1mm <200g

Output CE:

All Outputs: < 1mVrms (50Hz to 50MHz)

CS Rejection Input to Outputs:

V1: > 50dB

V2, V3, & V4: > 85dB

Output Configurations

The EAL-series can be tailored to most satellite platforms and the outputs can be configured to customer specific payload requirements.

Output 1: +2.5V to +22V Max 7.5A / 75W

Output 2: +2.5V to +15V Max 1.5A / 10W

Output 3: +2.5V to +15V Max 1A / 5W

Output 3: -1.5V to -15V Max 0.4A / 4W

BENEFITS

- Fully Customizable to Match Satellite Platform & Payload Requirements
- One High Efficiency Main Output and Three Low Noise Auxiliary Options
- On-Board EMC Filters Ensures Compliance without Additional Filtering
- Input to Output Power Efficiency of Up to 89%
- Design Data Package & Product Control Documentation Available

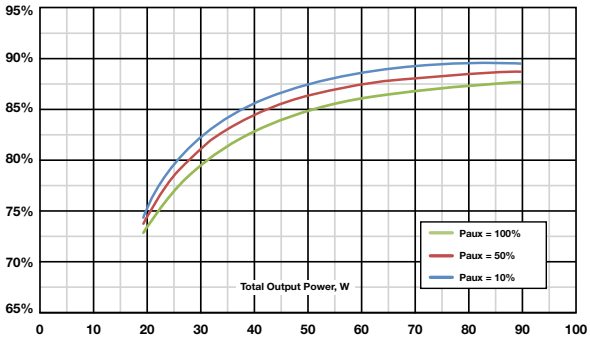
Design Expertise

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

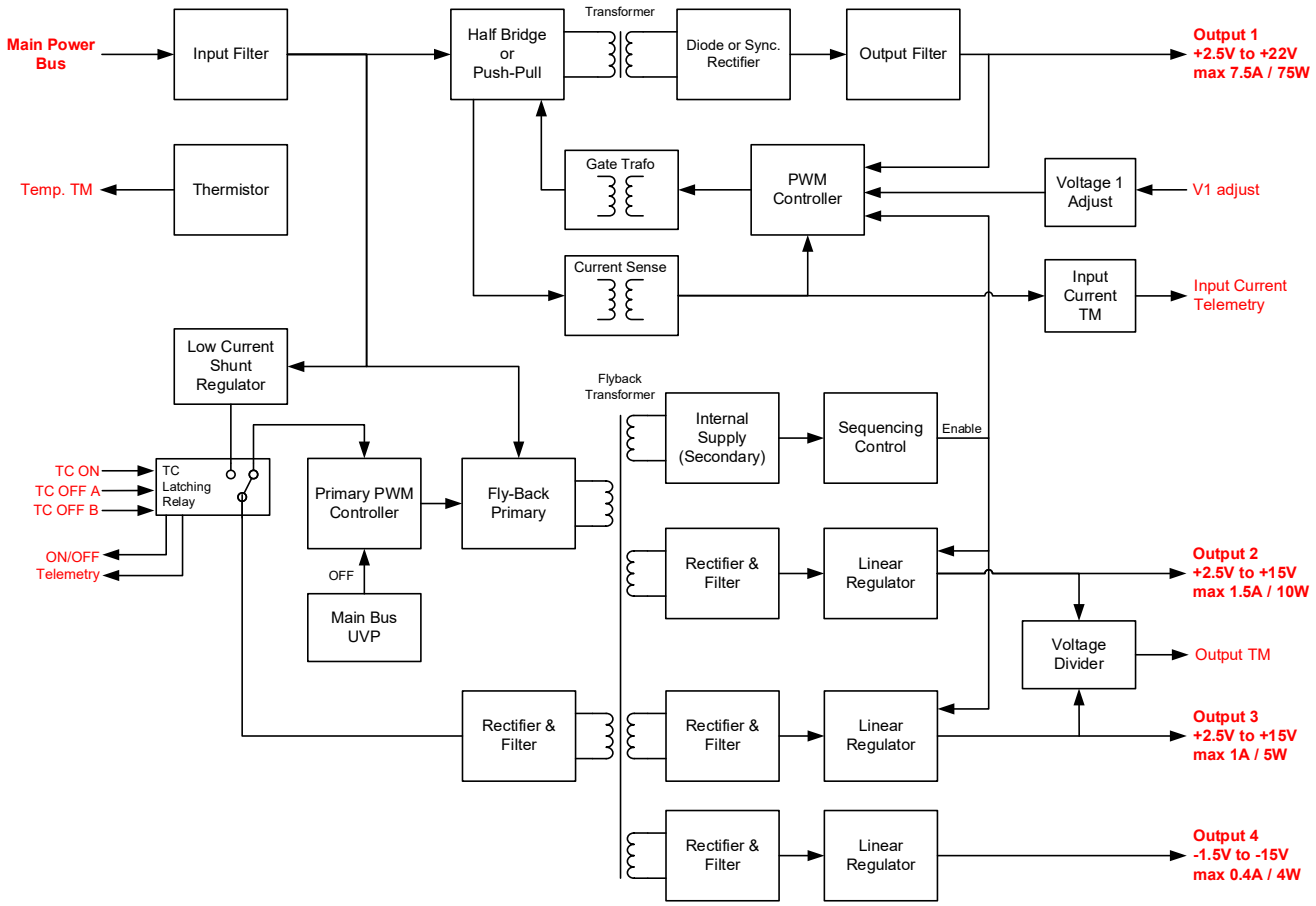
Typical Efficiency



Efficiency vs. Load on Ouput 1, Parametric with Load on Outputs 2, 3, & 4

EAL Series

GENERIC BLOCK SCHEMATIC



Flight Qualified and Export Approved Configurations					
Part #	Input Voltage	V1	V2	V3	V4
12060	46V - 51V	+8.6V / 5.3A	+12.3V / 0.75A	+6.5V / 1.0A	-12.3V / 0.20A
12114	98V - 101V	+5.3V / 8.0A	+6.5V / 0.68A	+12.1V / 0.26A	-6.5V / 0.04A
12185	98V - 101V	+5.3V / 7.82A	+6.5V / 0.43A	+12.1V / 0.08A	-6.5V / 0.03A
12188	26.5V - 28.5V	+23.0V / 3.6A	+6.0V / 0.09A	+6.0V / 1.10A	*Not Fitted*
12197	22V - 34V	20.0V / 1.9A	+9.0V / 0.70A	*Not Fitted*	-6.0V / 0.10A

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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