

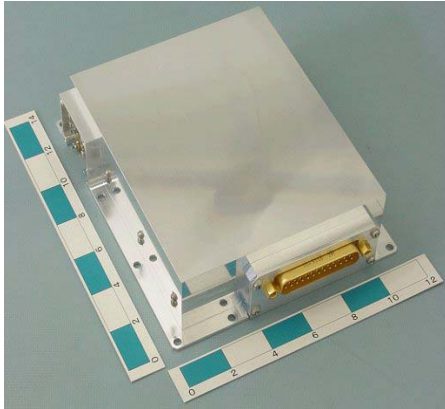
## High Performance EPC for SSPA

### Applications

Electrical Power Conditioner (EPC) for Solid State Power Amplifiers (SSPAs) and similar equipment having needs for:



- Very high efficient main output;
- Large current at the main output;
- 1 or 2 auxiliary outputs;
- Wide input voltage range.



### Technical Description

The main converter is using the following patented technologies:

- The main converter consists of the **TESLAconverter<sup>®</sup>** (the first space application in the world);
- The main transformer and the input and output inductors of converter are integrated into a single, **DC Transformer** magnetics structure;
- **Lossless Switching**.



The key performance features of these technologies are:

- Very high efficiency;
- Wide input voltage range;
- Good output voltage stability and load regulation;
- Small size and low mass.

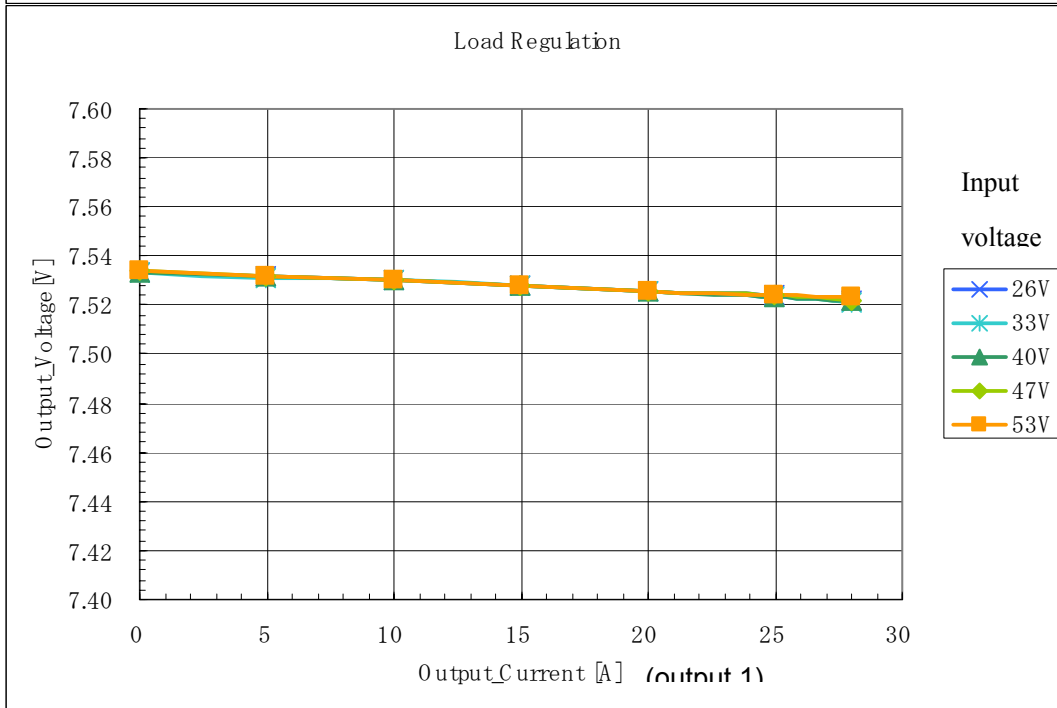
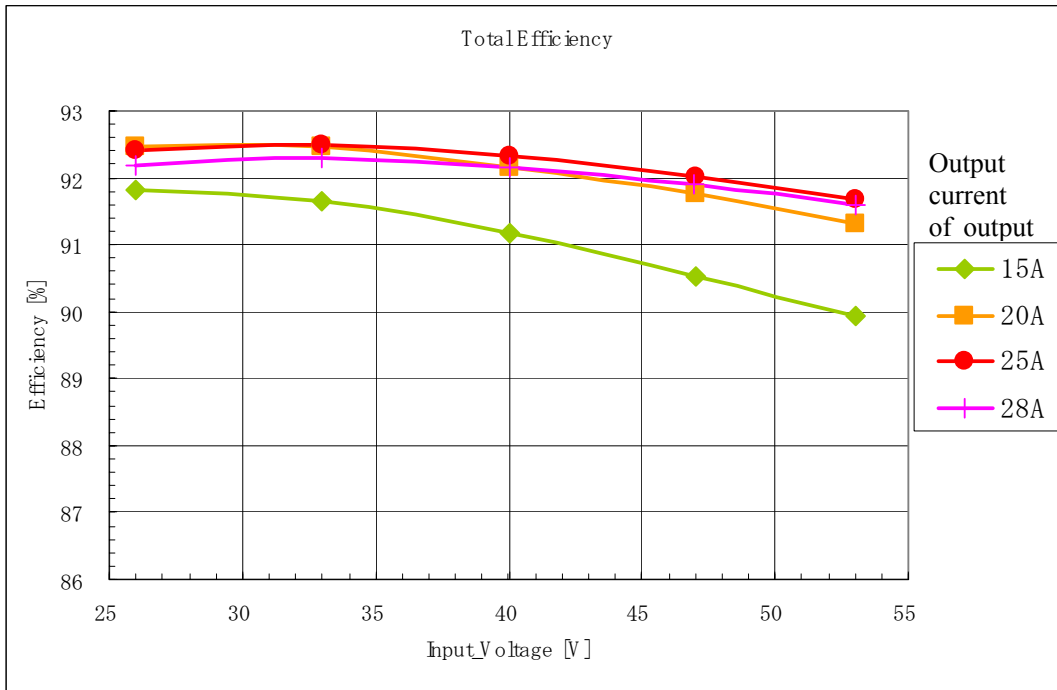
### Key technical specifications

Parameter	Output 1	Output 2	Output 3	Units
Input voltage range	26 to 53			Volts
Output voltage	+7.5±0.1	+5.0±0.1	-5.0±0.1	Volts
Output voltage adjustments	±0.7	—	—	Volts
Output current	0 to 25	0 to 0.5	0 to 0.5	Amperes
Output power	193			Watt
Ripple	30	12	5	mVp-p
CS rejection	42	43	50	dB
Sequencing	Follower	Follower	Raise fast/ Falls last	
Overall efficiency	92.4 typ			%
Size (with chassis)	134×114×35			mm
Mass (with chassis)	586			grams

**TESLAconverter<sup>®</sup>** is a registered trademark of Optimum Power Conversion, Inc., d.b.a. TESLACO.

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**Release schedule**

Ordering start: October, 2004 (EPC for SSPA)

December, 2004 (3.3V 50W Converter module under development)

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