## HMC DC-DC Converters (30W)

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed 30 W HMC DC-DC Converters to meet Electrical performance with High Reliability requirements for Space Application with minimum size and weight. HMC DC-DC Converters developed for Space Application adopting Innovative Thick Film Process technology developed and qualified for Space application.



30W HMC DC - DC Converter

## **Specifications:**

- Meets Electrical performance with High Reliability requirements for Space Application.
- · Minimum size and weight.

## **Major Specifications:**

The main features of the 30W HMC DC-DC Converter are as follows:

- Converter design meets high reliability requirements and provides output voltages of +5V, +15V and -15V.
- Components (in die form) used are compliant to MIL-38534 QML-V or Class-K
- Hybrid design and fabrication processes comply to ISRO-PAS-206 guidelines.
- Innovative thick film process technology with special subassemblies adopted for realisation of the power hybrid which is housed in custom designed package of Molybdenum base and Kovar ring.
- The Converter performance suits typical space electronic systems up to 30W, covering requirements of EMI, regulation, thermal dissipation and standard protection features.

The main specifications are as follows:

Input voltage range : 26-42V

Triple outputs (±15V and +5V) delivering up to 30W

Built-in EMI filter capable of meeting ISRO Standards (based on MIL-461C)

Converter shutdown feature

Efficiency : 75%

Switching frequency : 250 KHz

Short circuit, over load and under voltage lockout protections

Telemetry monitoring feature

Size : 3.5"x3.5"x0.65"

Weight : 245 gms

## **Technology Transfer from ISRO**

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below: