

POWER SUPPLY

Miniature Switchmode Power Supply - Missile Application



This miniature switchmode power supply (MSPS) is designed for use in missile applications. The MSPS uses a +/-20Vdc input voltage to provide six regulated DC voltage outputs. These voltage outputs are -2500V, +640V, +180V, +15V, -15V and +5V. The MSPS includes filtering on the input to reject high frequency noise spikes generated by mechanical power generators. The line and load regulation for the +640V output is less than 1%. The voltage regulation for the low voltage outputs is less than 4%. The power supply will operate from an input voltage range of 16Vdc to 35Vdc. The MSPS will reject 1-volt noise spikes generated at 1kHz. The power density of the MSPS is 5 Watts per cubic inch.

Features:

- Extreme Shock and Vibration Environments
- Meets Mil Standard 461 Conducted Emissions (with addition of small common mode capacitance)
- Qualified to Stringent Customer Test Specifications Including Full HAST Testing
- Miniature Package

Specifications:

Electrical Specifications

- **Nominal Input:**
+/-20Vdc
- **Output:**
-2500Vdc, +640Vdc, +180Vdc, +15Vdc, -15Vdc and +5Vdc
- **Power:**
1.2W
- **Efficiency:**
58%

Mechanical Specifications

- **Operating Temperatures:** -40°C (-40°F) to 85°C (185°F)
- **Weight:** 0.385 oz
- **Package Size:** 1.9" X 1.0" X 0.3"

Rev. C