

PSHA1503 High Voltage Power Supply



DESIGN FEATURES

- Compact EW High Voltage Power Supply
- Designed for Airborne Applications
- MIL-STD-704 3 kW AC to DC Converter
- Solid State HV Switch to individually control four TWTs
- Triple Depressed Collector and Grid Modulator Voltages
- Grid Pulsed for "look thru" and pulse applications up to 150 KHz
- Multi-Mode, Pulsed and CW Applications
- MTBF > 4,000 hours
- +5 and ± 12 VDC Output for Auxiliary Applications

Electrical Specifications

Prime Power	115/208 VAC, 400 Hz, 3-Phase
Input Current:	
Surge	11 Amps/phase
Operate	9 Amps/phase
Cathode Voltage	-3300 VDC
Collector 1 Voltage	2450 V wrt K
Collector 2 Voltage	1415 V wrt K
Collector 3 Voltage	565 V wrt K
FE Voltage:	
ON State	0 V wrt K
OFF State	1175 V wrt K
Heater Voltage	6.3 ± 0.3 VDC
Efficiency	84%

Mechanical Characteristics

Length	21.55 in.
Height	3.60 in.
Width.....	8.10 in.
Weight	36.50 lbs.

Environmental Specifications

Operating Temperature	-55 to +100°C
Operating Altitude	70,000 ft.
Reliability.....	>4,000 hours MTBF A_{UF}

Control and Monitoring

Control Interface

Inputs: Power On, Power Fail, Reset, Pulse/CW,
Modulation On/Off, Serial Link In, Bite Test Pulse
Outputs: Fault Flag, Status Flag, Command Ack, Serial
Link Out

Status Command

HV Enable Command, Ready, HVPS Ready, Refl. Pwr
Detected, Input RF below Ref., RF Deck Codes

Serial Link Faults

TWT 1-4 AC Helix, TWT 1-4 Heater, TWT 1-4 Temp,
Helix Average, Main Power Converter, HVPS, HVPS
Temp, Refl. Pwr (CW), Refl. Pwr (Pulse)