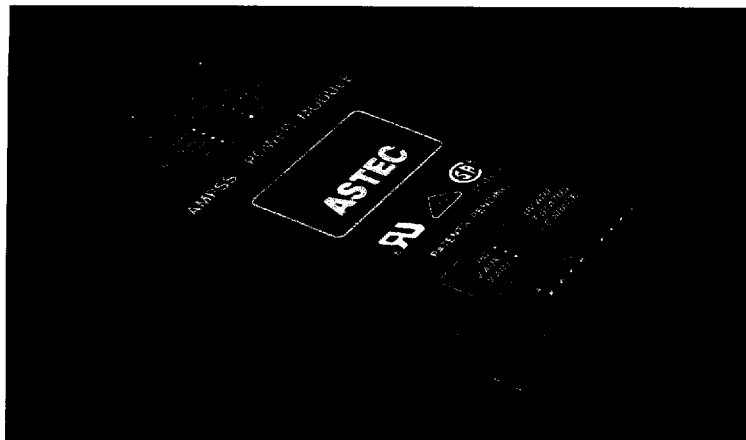




DJ80A Distributed Power Series 500 Watts max • 300V Input 24V or 48V Single Output

The DJ80A DC/DC converter series is part of Astec's family of advanced high density modular power supply components. The DJ80A is ideal for converting line voltages into 24V or 48V bus voltages for Distributed Power System front ends in telecommunications, EDP and industrial applications. This module exhibits exceptional power density, wide input voltage range and parallelability for high efficiency conversion (line to DC Bus) and battery systems.

SPECIAL FEATURES

- High power density: 90W/in³; 5.5W/cm³
- High efficiency: up to 90%
- 500KHz fixed frequency
- Zero voltage switching (ZVS)
- Low output ripple & noise
- Excellent transient response
- Wide input voltage range
- Parallelable
- Adjustable output voltage
- Temperature monitor
- Auxiliary power supply
- Short circuit protection
- Overtemperature protection
- Adjustable output overvoltage protection
- Adjustable output undervoltage protection
- Adjustable UVP timing delay

ENVIRONMENTAL

Operating Temperature (baseplate):
-20° to +65°C ambient, derate at 1%
per degree from 65°C to 85°C

Storage Temperature: -40° to 105°C

Overtemperature Shutdown:
95°C typical

MTBF: > 1 million hours

SAFETY

UL UL1950
CSA CSA22.2-234/22.2-950
VDE VDE0805
EN60950

ELECTRICAL SPECIFICATIONS

Input

Input Range 240 to 400 VDC, 420 VDC surge (1 sec)
Efficiency 88% typical, (48V @ 10.4A)

Control

Output Voltage Adjust . . . 80 to 110% V_o
Enable TTL compatible (low to enable)
Clock Input (Ext. sync) . . 5V @ 500KHz ± 10%
Power Good P.G. O.K. ~ 8V, P.G. low <0.8V
Aux Power Supply 18V/40mA max (Primary references)
Overvoltage Protection . . 100-125% of V_o, programmable using
external resistor
Output Undervoltage . . . Programmable using external resistor
Latch Status Output . . . Low < 0.8V = OFF; High > 2.4V = ON
Temp monitor 10mV/°K, 2.73V = 0°C
OTP Output Overtemperature shutdown < 0.8V

Output

Load Regulation 3% typical, min. 15% load
Line Regulation 1% typical
Transient Response 15% typical deviation, 900µs recovery (25-
75% full load)

ORDERING INFORMATION

Doc. No.**	Model Number	Input Voltage	Output Voltage	Output Current	Max Power
1325	DJ80A-300L-480F08*	300V	48V	8.3A	250W
1325	DJ80A-300L-480F10*	300V	48V	10.4A	500W
1325	DJ80A-300L-240F15*	300V	24V	14.6A	200W
1325	DJ80A-300L-240F17*	300V	24V	16.7A	400W

* Preliminary data

Warranty: 1 year