

M481 SERIES

THE MOST COMPLETE
VME SIZE/PACKAGE,
3 PHASE AC INPUT, UP TO 600W,
HIGH DENSITY, HIGH EFFICIENCY
PARALLEL OPERATION CAPABILITY,
MULTI - OUTPUT CONVERTERS.

APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

VME size/package

Parallel operation with
current sharing capability!
Synchronized (Rectifier System)
Low Output Voltages
High efficiency
Wide input range
Input / Output isolation
External Sync. (320 to 340KHz)
ON / OFF control using 28VDC input
EMI/RFI filters included
Indefinite short circuit protection with
auto-recovery
Over-voltage shutdown with
auto-recovery
Over temperature shutdown with
auto-recovery

ENVIRONMENTAL

Meets or exceeds MIL-STD-810D

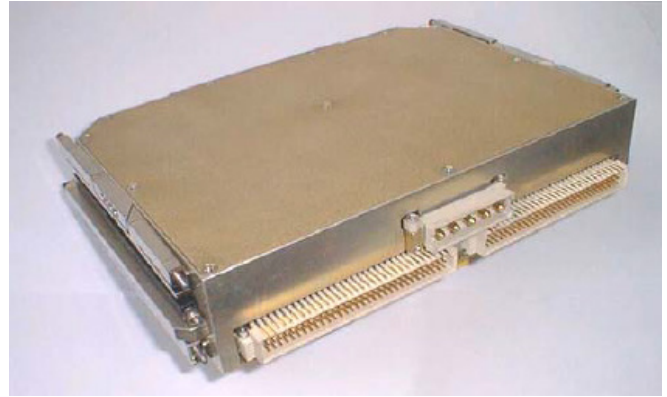
Temperature:

Operating -40°C to +71°C (baseplate)
Storage -55°C to +125°C

RELIABILITY

60'000 hours, calculated per
MIL-STD-217F at +40°C baseplate, AUF.

MPS can customize this product
To your requirements –
Contact us!



ELECTRICAL SPECIFICATIONS

INPUTS

DC input range: 28VDC (for ON/OFF control)

AC input range: 115 ±15%VAC, 400Hz, 3-Phase

Efficiency: up to 85%

EMI/RFI:

Design to meet or exceed MIL-STD-461D
CE102, CS101, CS114, CS115,
CS116, RE102, RS101, RS103

Input Transient Protection:

Meets or exceeds MIL-STD-704A

Isolation:

500V between AC Input and Outputs
500V between AC Input and Case
100V between DC Input and Outputs
100V between DC Input and Case

DC OUTPUTS (floating)

Line /load regulation (typical):

Less than 1% (no load to full load, -40°C to +71°C)

Ripple and noise: 50mVp-p, typical (max. 1%)

Current limiting:

Continuous protection for unlimited time.

Passive transzorb on outputs.

Over temperature protection:

Indication at baseplate temperature of +90°C (±5°C)

Isolation:

500V between Outputs and AC Input
100V between Outputs and DC Input
100V between Outputs and Case

PIN ASSIGNMENT

INPUT Connector, 424358 or equivalent

Pin No.	Pin Function
Po 1	PHASE A
Po 2	PHASE B
Po 3	PHASE C
Po 4	EXT CAP RTN
Po 5	EXT CAP +

OUTPUT Connector#1, 02011602101 or equivalent

Pin No.	Pin Function
Z24 to Z30, A24 to A30, B24 to B30, C24 to C30, D24 to D30	+3.3V/55A
Z17 to Z23, A17 to A23, B17 to B23, C17 to C23, D17 to D23	+3.3V/55A RTN
C16	+3.3V/55A SENSE
D16	+3.3V/55A SENSE RTN
Z9 to Z15, A9 to A15, B9 to B15, C9 to C15, D9 to D15	+2.8V/55A
Z2 to Z8, A2 to A8, B2 to B8, C2 to C8, D2 to D8	+2.8V/55A RTN
C1	+2.8V/55A SENSE
D1	+2.8V/55A SENSE RTN
A1	+2.8V/55A OUT ADJ
B1	+2.8V/55A OUT ADJ RTN
Z32, A32, B32, C32, D32	CHASSIS

OUTPUT Connector #2, 02011602101 or equivalent

Pin No.	Pin Function
Z12 to 18, A12 to 18, B12 to 18, C12 to 18, D12 to 18	+5.2V/30A
Z19 to 25, A19 to 25, B19 to 25, C19 to 25, D19 to 25	+5.2V/30A RTN
A5	+5.2V/30A SENSE
D5	+5.2V/30A SENSE RTN
Z31, A31, B31, C31, D31	+5.2V/3.2A
Z30, A30, B30, C30, D30	+5.2V/3.2A RTN
C28, D28	+15V/0.15A
C29, D29	+15V/0.15A RTN
C26, D26	-15V/0.3A
C27, D27	-15V/0.3A RTN

Pin No.	Pin Function
A9	RESERVED
B11, C11, D11	+15V/1A
B10, C10, D10	+15V/1A RTN
A10	RESERVED
B8, C8, D8	-15V/1A
B9, C9, D9	-15V/1A RTN
A4	SLAVE / OFF
B7	RESERVED
A3	V.GOOD
D4	SHUT DOWN CMD

Pin No.	Pin Function
Z3	OVER TEMP RPT
Z4	RESERVED
Z5	MISSING PHASE RPT
Z6	RESERVED
C5	RESERVED
C4	RESERVED
Z7	RESERVED
D7	RESERVED
D6	RESERVED
A8	RESERVED

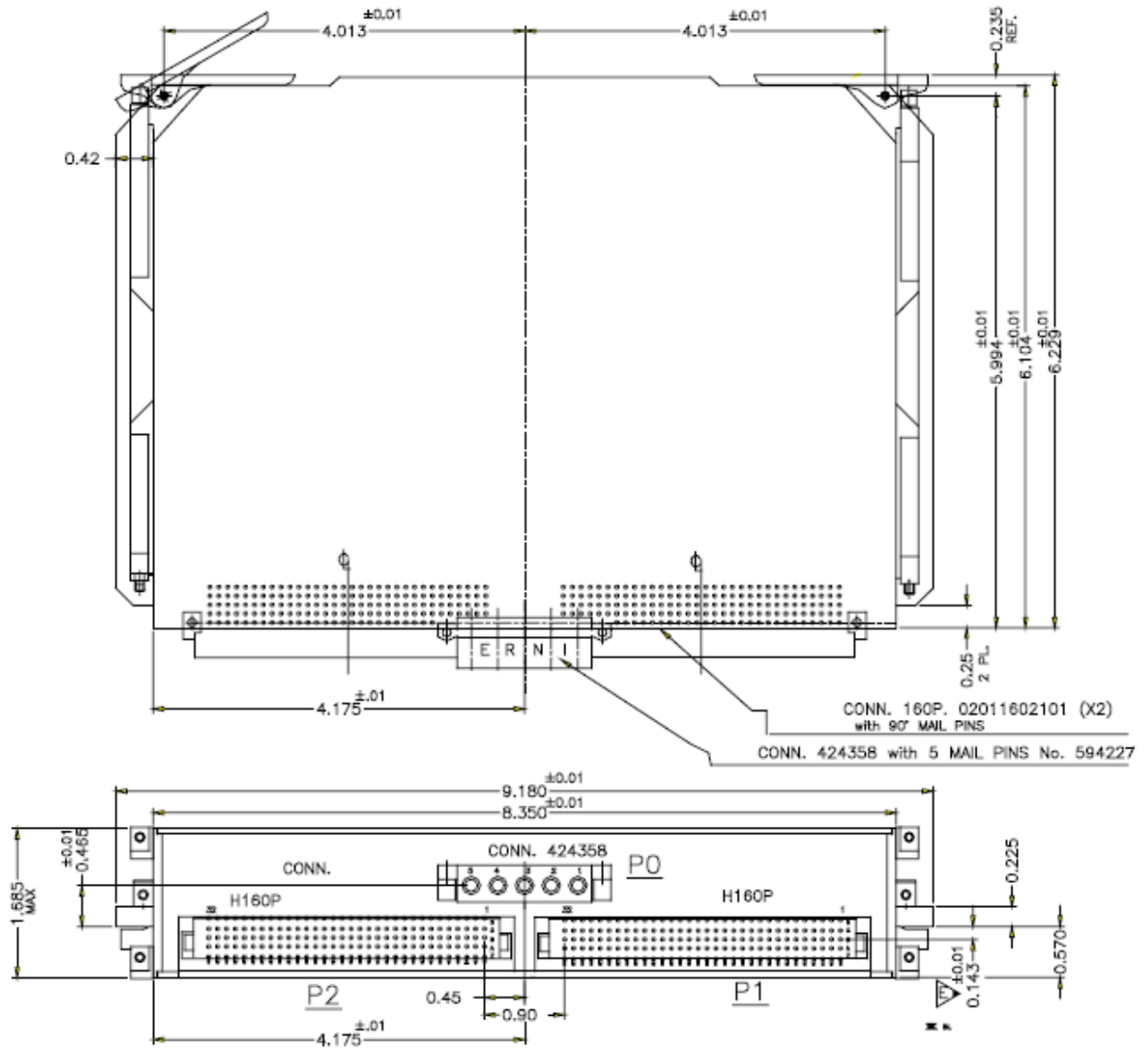
**OUTPUT Connector #2,
02011602101 or equivalent**

Pin No.	Pin Function
B5	SYN INPUT
C6	SYNINPUT RTN
A6	ON/OFF CMD
B4	28VON/OFF
A7	RELAY CTRL
B6	RESERVED
C7	RESERVED
D3	28V INPUT
C3	28V OUTPUT
B3	28V RTN

Pin No.	Pin Function
Z1, A1,B1, C1,D1	NEUTRAL

***MPS can customize
this product to your
requirements –
contact us!***

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
 .XX ±.02 IN
 .XXX ±.01 IN
3. Weight: 5 lb (2.25 Kg)

**MPS can customize this product to
your requirements –
contact us!**

*Specifications are subject to change without prior notice by the manufacturer