Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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TAMURA Corporation of America

Miniature Switch Mode Power Supply

Model

# AAD130SD

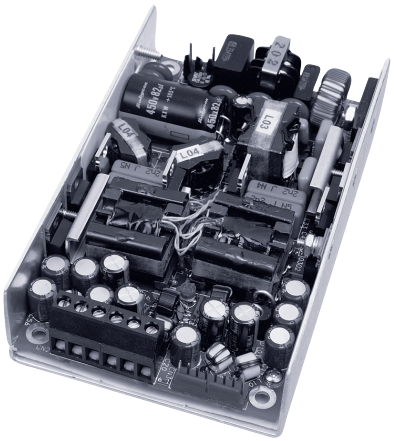
H.A.L.T. TESTED — Highly Accelerated Life Testing

130 Watts output power

Power Factor Correction

Parallel/Redundant Operation

Up to 90% Efficiency



## Electrical Specifications

| | |
|---|---|
| Input Voltage: | 90-264 VAC, 47-63 Hz |
| Input Current: | <2A RMS @ 115 VAC @ full load<br><1A RMS @ 230 VAC @ full load |
| Inrush Current: | <35A, pk @ 132 VAC @ cold start<br><75A, pk @ 264 VAC @ cold start |
| Power Factor: | >0.98 @ full load @ 115/230VAC input |
| Harmonic Distortion: | Meets EN61000-3-2 |
| EMI Filtering: | Meets CISPR 11 and 22 and FCC Part 15 Class B (conducted) |
| Input Protection: | Internal AC line fuse; 250 VAC, 4.0A |
| Surge Withstand: | Meets EN61000-4 |
| Output Power: | Up to 144W with 15CFM air; 80W Convection cooled (consult factory for current ratings) |
| Line Regulation: | ± 0.3% |
| Load Regulation: | ± 1% for V1 and V2 |
| PARD: | Greater of 1% or 50mV<br>20MHz bandwidth |
| Hold-up Time: | >20 ms @ full load |
| Turn-on Delay: | <2 seconds |
| Output Polarity: | See Voltage Chart |
| Minimum Load: | 7W (Single Output)<br>3.5W each (Dual Output) |
| Transient Response: | Greater of 150mV or 3% for 25% load change @ 1A/µs (V1 and V2) |
| Output Rise Time: | <250 ms (10% to 90%) |
| Remote Sense: | Standard on V1 and V2<br>Up to 400mV of cable drop |
| AC Power Fail: | $TTL_{LOW}$ logic "0" at least 5 ms before DC output drops 5% (without signal jitter).<br><10mA sink current for Power Fail "0".<br><1mA source current for Power Fail "1". |
| Overshoot/Undershoot: | <5% overshoot with remote sense at output terminals |
| Current Share (option): | Load currents of V1 and V2 for similar units can be shared @ <±5% of total load |
| Overvoltage Protect: | Factory set, 125% ±5% on V1 and V2<br>cycle AC to reset |
| Short Circuit Protection: | All outputs are auto recovery |
| Reverse Voltage: | Reverse current up to rated outputs |
| Case Power Protection: | Standard operation interrupt (hiccup mode) |
| Efficiency: | Up to 90% |
| MTBF: | MIL-STD-HDBK 217E<br>>200,000 hours @ 25°C<br>Highly Accelerated Life Testing |

## Available Voltage Outputs*

| Dual Output Voltage Codes | Dual Output V1 Voltages (Volts) | Dual Output V1 Currents (Amps) | Dual Output V2 Voltages (Volts) | Dual Output V2 Currents (Amps) | Single Output Voltage Codes | Single Output V1 Voltages (Volts) | Single Output V1 Currents (Amps) |
|---|---|---|---|---|---|---|---|
| -2 | 3.3 | 16 | 3.3 | 16 | -20 | 3.3 | 32 |
| -3 | 5 | 14 | 5 | 14 | **-30** | **5** | **26** |
| -4 | 12 | 6 | 12 | 6 | **-40** | **12** | **12** |
| -5 | 15 | 5 | 15 | 5 | -50 | 15 | 9 |
| -6 | 24 | 3 | 24 | 3 | **-60** | **24** | **6** |
| -7 | 28 | 2.5 | 28 | 2.5 | -70 | 28 | 5 |
| -8 | 36 | 2 | 36 | 2 | -80 | 36 | 4 |
| -9 | 48 | 1.5 | 48 | 1.5 | **-90** | **48** | **3** |

** Consult factory for other voltages and OEM quantities.*

*Note: Standard Dual Output Models are **-34** and **-46***

*Note: Standard Single Output Models are shown **bold***

***PART # STRUCTURE:***

| | | | | |
|---|---|---|---|---|
| ***MODEL*** | - | ***VOLTAGE CODE*** | - | ***OPTION CODES*** *(See back)* |
| | - | ***V1*** | - | |
| ***AAD130SD*** | - | ***X X*** | - | ***ABC....*** |

***Example1: Part Number AAD130SD-56-AC = 130W Dual Output, Power Factor Corrected, 15V @ 5A and 24V @ 3A with Current Sharing and a Thruhole Chassis.***

***Example2: Part Number AAD130SD-30-BM = 130W Single Output, Power Factor Corrected, 5V @ 26A with PF Invert and Metric Mounting.***

CLICK HERE TO SEE THE AAD130SD CODE TABLE AND AVAILABLE OPTIONS.

TAMURA Corporation of America

Model

# AAD130SD

RoHS COMPLIANT

## Options (code)

#6-32 PEM Nut (Standard)
Current Sharing (A)
PF Invert (B)
Thru-Hole Mounting (C)
Metric Mounting (M)
PF Open Collector (O)
Input and Options with Gold Pins (G)
Molex Output Connector with Gold Pins (J)
Molex Connectors with Standard Pins (K)

## Certifications

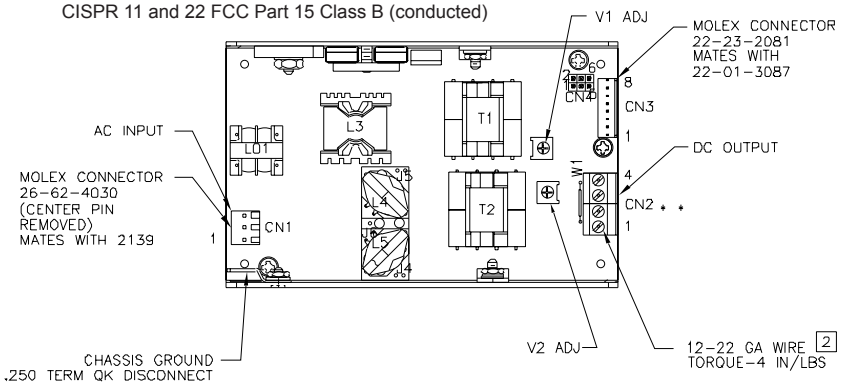
UL60950-1
CSA C22.2 No. 60950-1
IEC60950-1
EN60950-1

## Compliance

EN61000-4-5 Level 3
EN61000-4-2 Level 2
EN61000-3-2
EN61000-4-2 Level 3 (Air Only)
EN61000-4-4 Level 3
EN61000-4-11
CISPR 11 and 22 FCC Part 15 Class B (conducted)

## Physical Specifications

| | |
|---|---|
| Dimensions: (HxWxL) | 1.25" x 3.14" x 5" |
| Operating Temp: | 0 to 50°C; rated power to 50°C with 15CFM air |
| Relative Humidity: | 5% to 90%, non-condensing |
| Storage: | -50 to 85°C/20-90% RH |
| Altitude: | 10,000' operating; 40,000' storage |




| PIN NO. | CN1 |
|---|---|
| 1 | AC LINE |
| 2 | |
| 3 | NEUTRAL |

MOLEX CONNECTOR 26-60-4030 CENTER PIN REMOVED

| | PIN NO. | CN2 | |
|---|---|---|---|
| *** | 1 | V2 | ** |
| | 2 | RTN | |
| | 3 | RTN | |
| *** | 4 | V1 | ** |

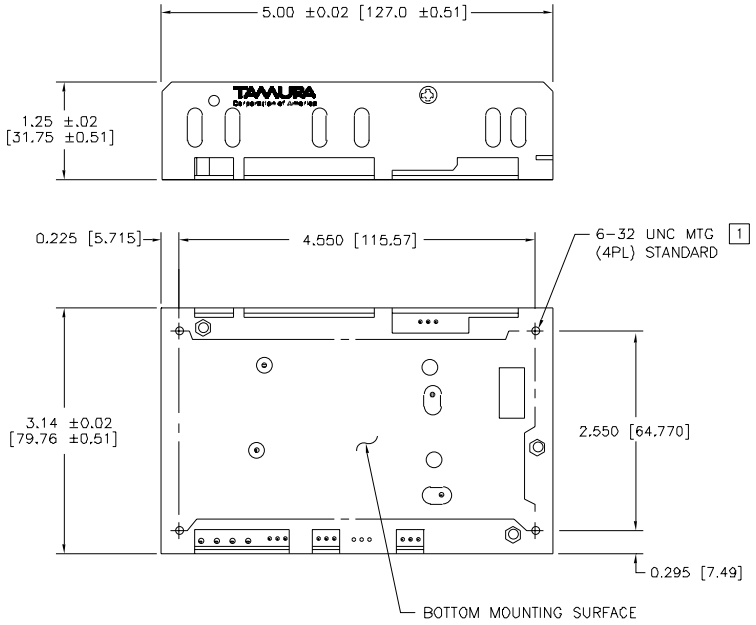
FOR 12-22 GA WIRE TORQUE-4 IN/LBS

| PIN NO. | CN3 | |
|---|---|---|
| 1 | V2 CURRENT SHARE | |
| 2 | V1 CURRENT SHARE | |
| 3 | POWER FAIL | |
| 4 | RTN | |
| 5 | V1 -REMOTE SENSE | * |
| 6 | V1 +REMOTE SENSE | * |
| 7 | V2 +REMOTE SENSE | * |
| 8 | V2 -REMOTE SENSE | * |

MOLEX CONNECTOR 22-23-2081

PIN 1 & PIN 2 ARE CONNECTED INTERNALLY
PIN 5 & PIN 8 ARE CONNECTED INTERNALLY
** FOR SINGLE OUTPUT MODELS
PIN 6 & PIN 7 ARE CONNECTED INTERNALLY

| UNIT WEIGHT |
|---|
| 0.72 LBS |




* WARNING: DAMAGE WILL OCCUR IF REMOTE SENSE LEADS ARE REVERSED OR USED WITH LOAD DISCONNECTED FROM RESPECTIVE OUTPUTS.

* * NOTE: TO INSURE PROPER REGULATION, UNIT REQUIRES A MINIMUM LOAD OF 7 WATTS FOR SINGLE OUTPUT MODELS AND 3.5 WATTS ON EACH OUTPUT FOR DUAL OUTPUT MODELS.

*** NOTE: V1 AND V2 ARE CONNECTED INTERNALLY FOR SINGLE OUTPUT MODELS

2 OPTIONAL- MOLEX CONNECTOR LIMITED TO 7A FOR V1, V2 OUTPUT

1 OPTIONAL- #6 CLEARANCE HOLE PROVIDED THROUGH THE BOARD AND CHASSIS FOR TOP SIDE MOUNTING OF POWER SUPPLY.

NOTES: UNLESS OTHERWISE SPECIFIED



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