

Specifications:

Signal Input/Output: Differential (TMDS/CML)

Gain: Unity

Finish: (except for screws, base and connectors): Gold Chromate or CARC White Paint

Input Voltage: 16-40 VDC

Power Consumption: 3.5 - 10.0 Watts depending on configuration

Power Dissipation: 0.28 – 2.0 Watts depending on configuration

Weight: 1.0 - 2.5 lbs (nominal)

Qualification (Data available upon request):

Power: Mil-Std-704D, 1275

Environmental: Mil-Std-810G

Temperature:

Storage: -55° to +85°C

Functional: -40° to +71°C

Short Time Operating: +85°C

Altitude: Non-Pressurized Area, Cl 1 per MIL-E-5400T (0-50,000Ft)

Humidity: DO-160C, Cat A

MIL-STD-810E Method 507.3, Procedure III (Aggravated), 10ea 24 hr cycles

Salt Fog: MIL-STD-810E Method 509.3, Procedure I

Sand and Dust: MIL-STD-810E Method 510.3, Procedure I

Acceleration: Operational: +/-6.5G's, Non-operational: +/-9 G's

Endurance Sine on Random Vibration:

MIL-STD-810F Method 514.5 Category 13 and IF-3AA0-08002B.

Rapid Decompression: MIL-STD-810E Method 500.3 para II-3.3 Procedure III

Functional and Crash Safety Shock Testing:

DO-160C Section 7 Impulse, 6 G's Operational, 15 G's Crash Safety.

EMI: Mil-Std-461

Conducted Emissions, CE101

Conducted Emissions, CE102

Radiated Emissions, RE101

Radiated Emissions, RE102

Conducted Susceptibility, CS101

Conducted Susceptibility, CS114

RF Conducted Susceptibility, RFCS

Radiated Susceptibility, RS103

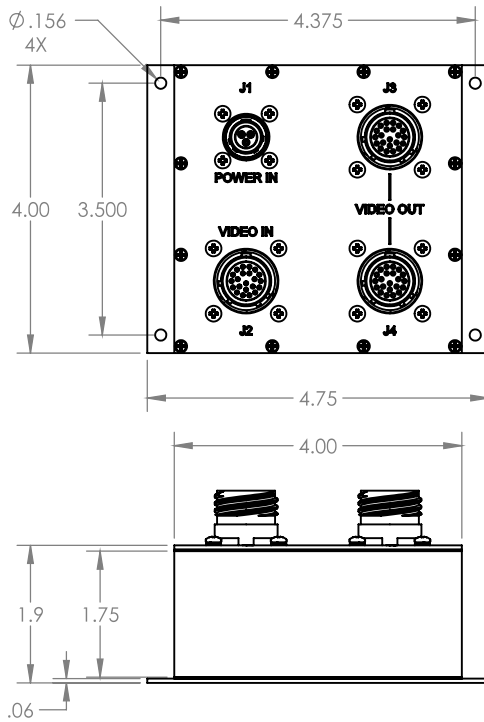
RF Radiated Susceptibility

Electrostatic Discharge, ESD

Lightning Induced Transient Susceptibility, LITS

MTBF: 82,000 – 96,000Hrs

Outline and Mounting Drawings:



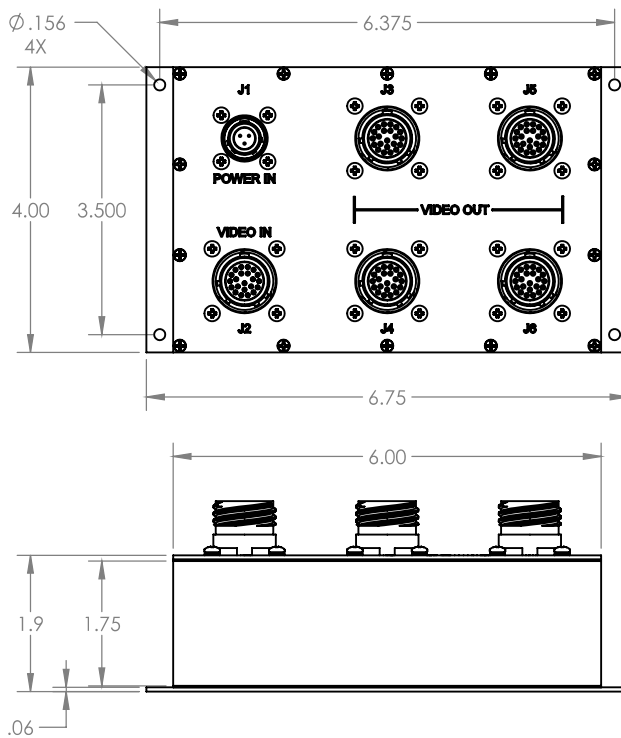
J1 - POWER IN - D38999/20WA98PN

| PIN# | SIGNAL |
|------|----------------|
| A | +28VDC IN |
| B | +28 VDC RETURN |
| C | CHASSIS GND |

J2 - HDMI/DVI-D IN - D38999/20WC35PN
J3-4 - HDMI/DVI-D OUT - D38999/20WC35SN

| PIN# | SIGNAL | PIN# | SIGNAL |
|------|---------------|------|-----------------|
| 1 | TMDS D2+ (R+) | 12 | RESERVED |
| 2 | TMDS D2- (R-) | 13 | RESERVED |
| 3 | TMDS D1+ (G+) | 14 | RESERVED |
| 4 | TMDS D1- (G-) | 15 | TMDS D2 (R) GND |
| 5 | TMDS D0+ (B+) | 16 | TMDS D1 (G) GND |
| 6 | TMDS D0- (B-) | 17 | TMDS D0 (B) GND |
| 7 | CLK+ | 18 | CLK GND |
| 8 | CLK- | 19 | DDC 5V |
| 9 | DDC SCL | 20 | DDC GND |
| 10 | DDC SDA | 21 | RESERVED |
| 11 | RESERVED | 22 | HPD |

ADV-DVID-12 Outline and Mounting Drawing



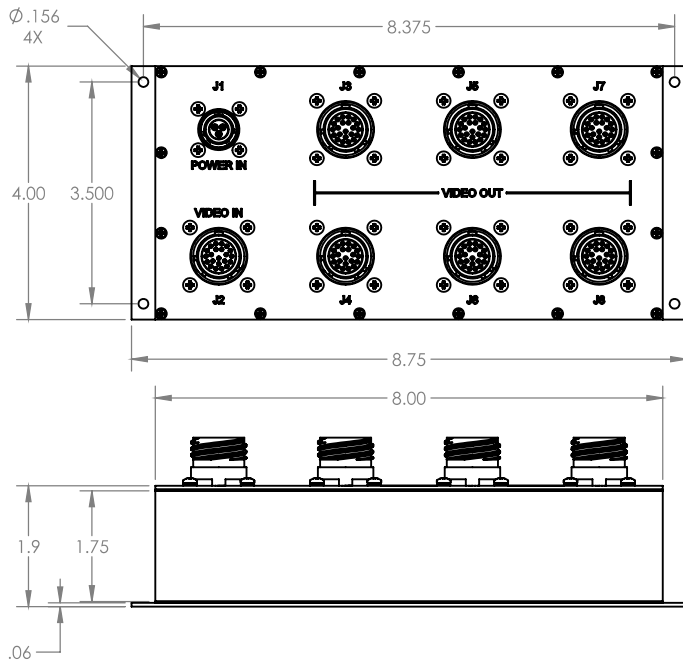
J1 - POWER IN - D38999/20WA98PN

| PIN# | SIGNAL |
|------|----------------|
| A | +28VDC IN |
| B | +28 VDC RETURN |
| C | CHASSIS GND |

J2 - HDMI/DVI-D IN - D38999/20WC35PN
J3-6 - HDMI/DVI-D OUT - D38999/20WC35SN

| PIN# | SIGNAL | PIN# | SIGNAL |
|------|---------------|------|-----------------|
| 1 | TMDS D2+ (R+) | 12 | RESERVED |
| 2 | TMDS D2- (R-) | 13 | RESERVED |
| 3 | TMDS D1+ (G+) | 14 | RESERVED |
| 4 | TMDS D1- (G-) | 15 | TMDS D2 (R) GND |
| 5 | TMDS D0+ (B+) | 16 | TMDS D1 (G) GND |
| 6 | TMDS D0- (B-) | 17 | TMDS D0 (B) GND |
| 7 | CLK+ | 18 | CLK GND |
| 8 | CLK- | 19 | DDC 5V |
| 9 | DDC SCL | 20 | DDC GND |
| 10 | DDC SDA | 21 | RESERVED |
| 11 | RESERVED | 22 | HPD |

ADV-DVID-14 Outline and Mounting Drawing



J1 - POWER IN - D38999/20WA98PN

| PIN# | SIGNAL |
|------|----------------|
| A | +28VDC IN |
| B | +28 VDC RETURN |
| C | CHASSIS GND |

J2 - HDMI/DVI-D IN - D38999/20WC35PN

J3-8 - HDMI/DVI-D OUT - D38999/20WC35SN

| PIN# | SIGNAL | PIN# | SIGNAL |
|------|---------------|------|-----------------|
| 1 | TMDS D2+ (R+) | 12 | RESERVED |
| 2 | TMDS D2- (R-) | 13 | RESERVED |
| 3 | TMDS D1+ (G+) | 14 | RESERVED |
| 4 | TMDS D1- (G-) | 15 | TMDS D2 (R) GND |
| 5 | TMDS D0+ (B+) | 16 | TMDS D1 (G) GND |
| 6 | TMDS D0- (B-) | 17 | TMDS D0 (B) GND |
| 7 | CLK+ | 18 | CLK GND |
| 8 | CLK- | 19 | DDC 5V |
| 9 | DDC SCL | 20 | DDC GND |
| 10 | DDC SDA | 21 | RESERVED |
| 11 | RESERVED | 22 | HPD |

ADV-DVID-16 Outline and Mounting Drawing

Connector Specifications:

| LRU Connector Specification | | | | Mating Connector Specification |
|--|-------|------------------|---|---|
| Power In | J1 | 38999 series III | TE Connectivity / Deutsch D38999/20WA98PN * | TE Connectivity / Deutsch D38999/26WA98SN * |
| DVI-D In | J2 | 38999 series III | TE Connectivity / Deutsch D38999/20WC35PN * | TE Connectivity / Deutsch D38999/26WC35SN * |
| DVI-D Out | J3-J8 | 38999 series III | TE Connectivity / Deutsch D38999/20WC35SN * | TE Connectivity / Deutsch D38999/26WC35PN * |
| * "W" in D38999 part number denotes standard olive drab (cadmium) plating. "F" in D38999 part number denotes optional electroless nickel plating. | | | | |