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VGA/SVID Product Series (10-12-2018)

Model Number	Part Number
ADV-301-VGA	14000-300
ADV-SVID-12	15800-300
ADV-301-VGA-2	15800-300
ADV-301-VGA-2-1	17600-300



ADV-301-VGA-2 Pictured

General

The ADV-301-VGA Series consists of several Component Video Amp/Splitters. The system is operated with nominal 28 VDC input power. All independent outputs are unity gain from video in. Different input and output impedances are available upon request, and can be integral with chassis ground as well as different fixed gains from video in.

Configuration

See the attached Outline and Mounting Drawings for the Standard Series with connector types shown on the last Summary page. Video connectors can be any combination of BNC or TNC, single ended or differential, top or side mounted, uncapped or capped with tethers.

Specifications:

Signal Input/Output: Single-ended or Differential

Gain: Unity

Finish: (except for screws, base and connectors): Gold Chromate with black silkscreen

Input Voltage: 18-36 VDC

Power Consumption: 1.5 - 2.5 Watts depending on configuration

Input Signal Amplitude: 0.5 to 5.0V peak-to-peak

Input Overload: 10V peak-to-peak *Phase Characteristics:* Non-Inverting

Output Signal Amplitude: Single ended outputs 0.5V to 3.0V peak-to-peak

Bandwidth: Flat within \pm 0.4dB from 30Hz to 30.0MHz at 1V peak-to-peak output, gain = 1

Noise: 0.01 peak-to-peak at 1V peak-to-peak output, gain = 1

Harmonic Distortion: Less than 2.5% at 1V peak-to-peak output, gain = 1

Current: Less than 100 milliamps Ripple: Less than 1.5V peak-to-peak Reverse Polarity Protection: Provided

50 VDC Transient @ 100mSec *Weight:* 0.6-1.5 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 PWR IN P/N D38999/20WA98PN PIN # SIGNAL A + 28 VDC IN B +28 VDC RETURN C CHASSIS GND .19 4.375 ø.156 SIGNAL RED SIGNAL IN GREEN SIGNAL IN BLUE SIGNAL IN CONN # PIN J2 1 3.00 2.500 ANALOG GND V-SYNC IN DIGITAL GND MTSC VIDEO IN MTSC VIDEO GND +12 VDC IN + 12 VDC IN +12 VDC GND SPARE 8 9 10 11 12 13 \oplus \oplus .25. CONN # PIN J3 1 SIGNAL RED SIGNAL OUT (BUFFERED) GREEN SIGNAL OUT (BUFFERED) BLUE SIGNAL OUT (BUFFERED) ANALOG GND (COMMON GND) <u>/\$\</u> ANALOG GND (COMMON GND) H-SYNC OUT (BUFFERED) V-SYNC OUT (BUFFERED) DIGITAL GND (COMMON GND) NISC VIDEO OUT (BUFFERED) NISC VIDEO GND (COMMON GND) H12 VDC IN (PASS THRU) +12 VDC IN (PASS THRU) +12 VDC IN (PASS THRU) J1 PWR IN J2 VIDEO IN J3 VIDEO OUT /ŝ\ 1.52 ŹS. 12 +12 VDC GND (PASS THRU) 13 SPARE (PASS THRU) .06 CHEM FILM BOTTOM OUTLINE & MOUNTING ESCM NO. EON INSTRUMENTATION INC. 15531 CABRITO RD, VAN NUYS, CA 91406 (818)781-2187 FAX (818)781-3116 1. INPUT POWER: 28 VDC, 3 WAITS NOMINAL 2. FINISH: EXCEPT FOR SCREWS AND CHASSIS BOITOM, CARC WHITE PAINT, BLK LETTERING CARC PAINT IN ACCORDANCE WITH MIL-C-53072 AND MIL-T-704, TYPE G TOP COAT TO BE IAW MIL-C-22750 COLOR FED-STD-595 17925 (WHITE) 3. WEIGHT: 1.0 LB NOMINAL 4. VIDEO GAIN: UNITY GAIN AT 75 OHM IN/OUT IMPEDANCE 22198 UNLESS OTHERWISE SPECIFIED TOLERANCES: DECIMAL: X ± -1 14000-300 TOLERANCES: DECIMAL: X ± .1 .XX ± .02 .XXX ± .005 ANGLES: ± 1.0° UNITS: INCHES [mm] FORMAT: ACAD R12C2 O&M, VIDEO AMP ADV-301-VGA 5 ANALOG GND, DIGITAL GND, AND NTSC GND TIED TOGETHER INTERNALLY REV DATE FILE NO. SCALE: NONE 14000-300.DWG Α ADV-301-VGAOutline and Mounting Drawing 2 15800-300 F 1 J1 PWR IN P/N: D38999/20FA98PN REV. DESCRIPTION DATE IR INITIAL RELEASE 08/12/2014 PIN # SIGNAL ADDED MISSING MOUNTING HOLE DIMENSION. ADDED SILKSCREEN ARTWORK. ADDED ID LABEL. CHANGED 12-14 CONNECTOR PIN-OUTS TO MATCH CUSTOMER'S MATING CABLES. +28VDC IN +28VDC RETURN EC158-00 09/04/2014 D CHASSIS GND CORRECTED HOUSING MATERIAL SPECIFICATION 06/23/2015 J2 VGA IN P/N: D38999/20FB35PN FC158-03 ADDED STANDARD PIN-OUT CONFIGURATION 12/07/2015 J3-J4 VGA OUT P/N: D38999/20FB35SN D EC158-05 REMOVED THALES PIN-OUT CONFIGURATION 08/05/2016 EC158-06 ADDED S-VIDEO CONFIGURATION 09/28/2017 \$-VIDEO CONFIGURATION VGA CONFIGURATION Ø.156 RED Y (LUMA) [120.7] [4.0] RED GND Y RTN 4.375 4X GREEN C (CHROMA) GREEN GND C RTN C DO NOT CONNEC 5 BLUE BLUE GND DO NOT CONNECT 6 HSYNC DO NOT CONNEC 2.500 3.00 76.2 8 HSYNC GND DO NOT CONNECT 63.5 VSYNC DO NOT CONNECT 10 VSYNC GND DO NOT CONNECT 11 SPARE SPARE SPARE SPARE .25 13 SPARE SPARE .19 В В 4.8 101.6 1.50 [38.0] V CHEM-FILM FINISH ON CHASSIS BOTTOM OTES: INPUT POWER: 28VDC, 3W NOMINAL, 4W MAX HOUSING: AL 60.63759 BODY AND AL 5052-H32 COVERS WITH CHEMFILM BINISH PER MILL-C.5541 CLASS 3. FINISH: EXCEPT FOR SCREWS AND CHASSIS BOTTOM, CARC WHITE PAINT, BIACK LETTERING, CARC PAINT IN ACCORDANCE WITH MILC-53072 AND MIL-T-04, TYPE G. TOP COAT TO BE IAW MIL-G-22750 COLOR FED-STD-595 17952 (WHITE) WEIGHT: 1.0 IB 10.5Kg] NOMINAL VIDEO CAIN: UNITY GAIN AT 75-OHM IMPEDANCE. LABEL CONTENT MUST MATCH MODEL NUMBER

ADV-301-VGA-2/ADV-SVID-12 Outline and Mounting Drawing

OLERANCES: .XXX": ±0.005" [±0.12mm] .XX": ±0.02" [±0.5mm] .X": ±0.1" [±2.5mm]

MATERIAL: SEE NOTES

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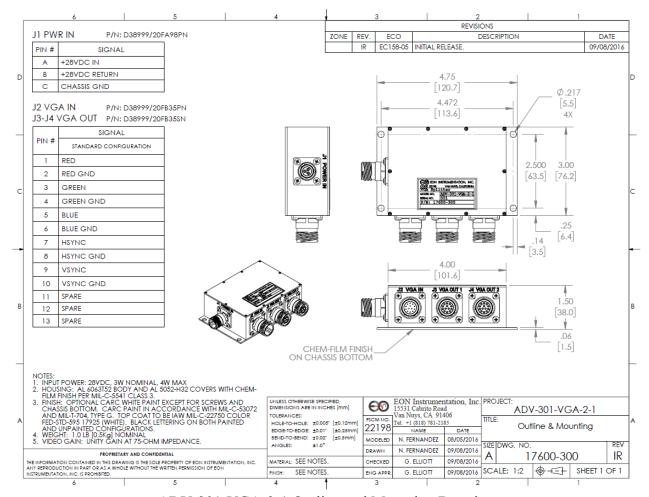
S: DATE: NCF 12/07/2017

JN 12/07/2017

EON Instrumentation, Inc. 15531 Cabrito Road • Van Nuys, CA 91406 Tel: +1 (818) 781-2185 • CAGE Code: 22198 TITLE: Outline & Mounting

ADV-301-VGA-2 ADV-SVID-12 SIZE PART NO. DWG. NO. A 15800-300 15800-300

SCALE: 1:2 ⊕ € SHEET 1 OF 1



ADV-301-VGA-2-1 Outline and Mounting Drawing