



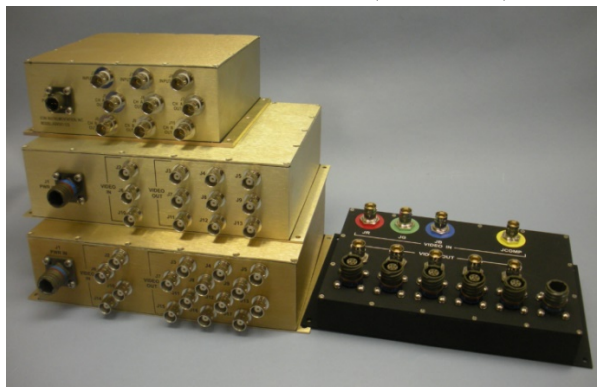
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Multiple Input Video Amplifier Product Series (10-16-2018)

Model Number	Part Number
ADV-301-123	12887-300
ADV-301-133	13700-300
ADV-301-134	13800-300
ADV-301-31	12935-300



General

The ADV-301-Multiple Input Series has a variety of Video Amplifier/Splitters. The systems are operated with nominal 28 VDC input power. Input and output impedance is 75 ohms for the basic series. Video returns are common to chassis ground. 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. Eon also manufactures units with individual user adjustable gain for each output.

Configuration

See the four 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

Gain: Unity

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

Input Voltage: 18-36 VDC, 28VDC Nominal

Power Consumption: 1.5 - 2.5 Watts depending on configuration

Input Impedance: 75 Ohm Standard (Other impedances available. Specify when ordering)

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 $\pm 0.4\text{dB}$ 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

Ripple: Less than 1.5V peak-to-peak

Reverse Polarity Protection: Provided

50 VDC Transient @ 100mSec

Weight: 3.0 lb (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

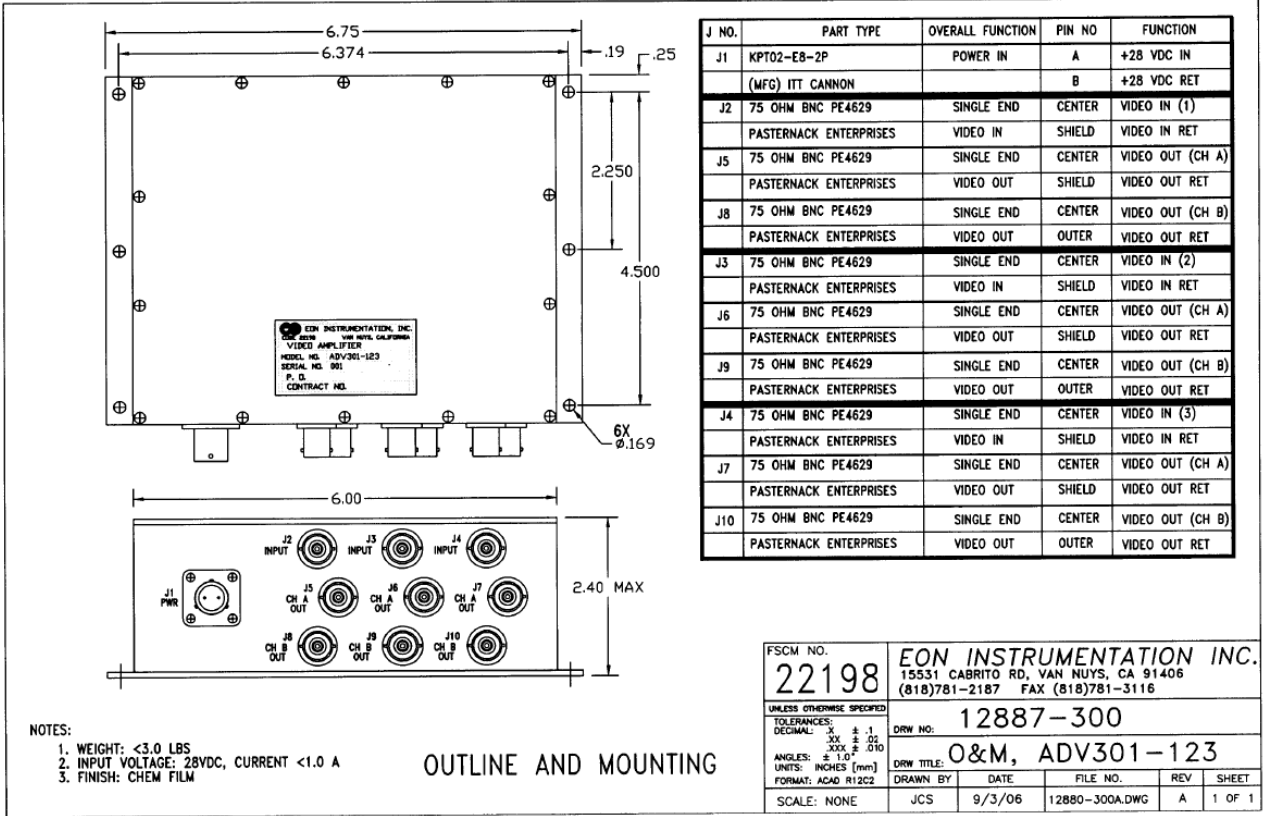
RF Radiated Susceptibility

Electrostatic Discharge, ESD

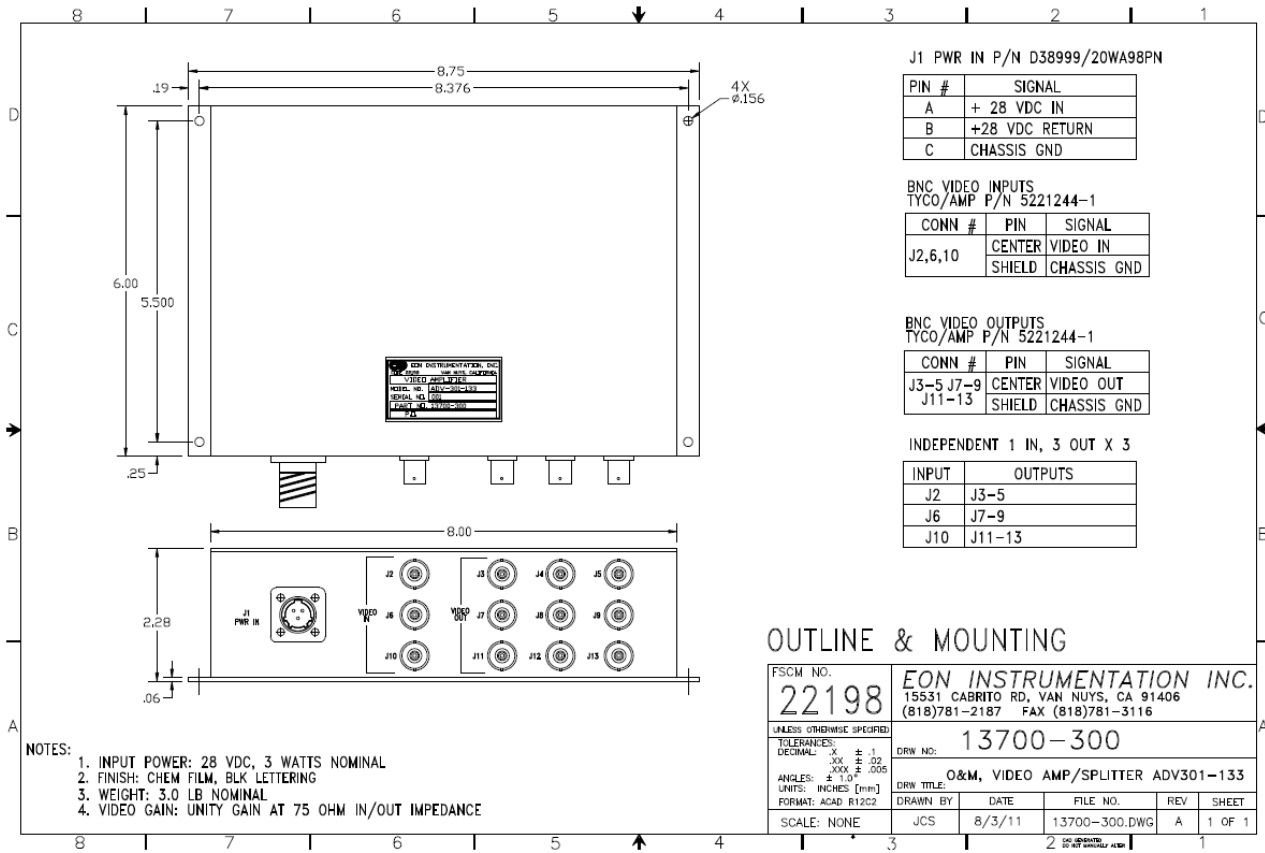
Lightning Induced Transient Susceptibility, LITS

MTBF: 82,000 – 96,000Hrs

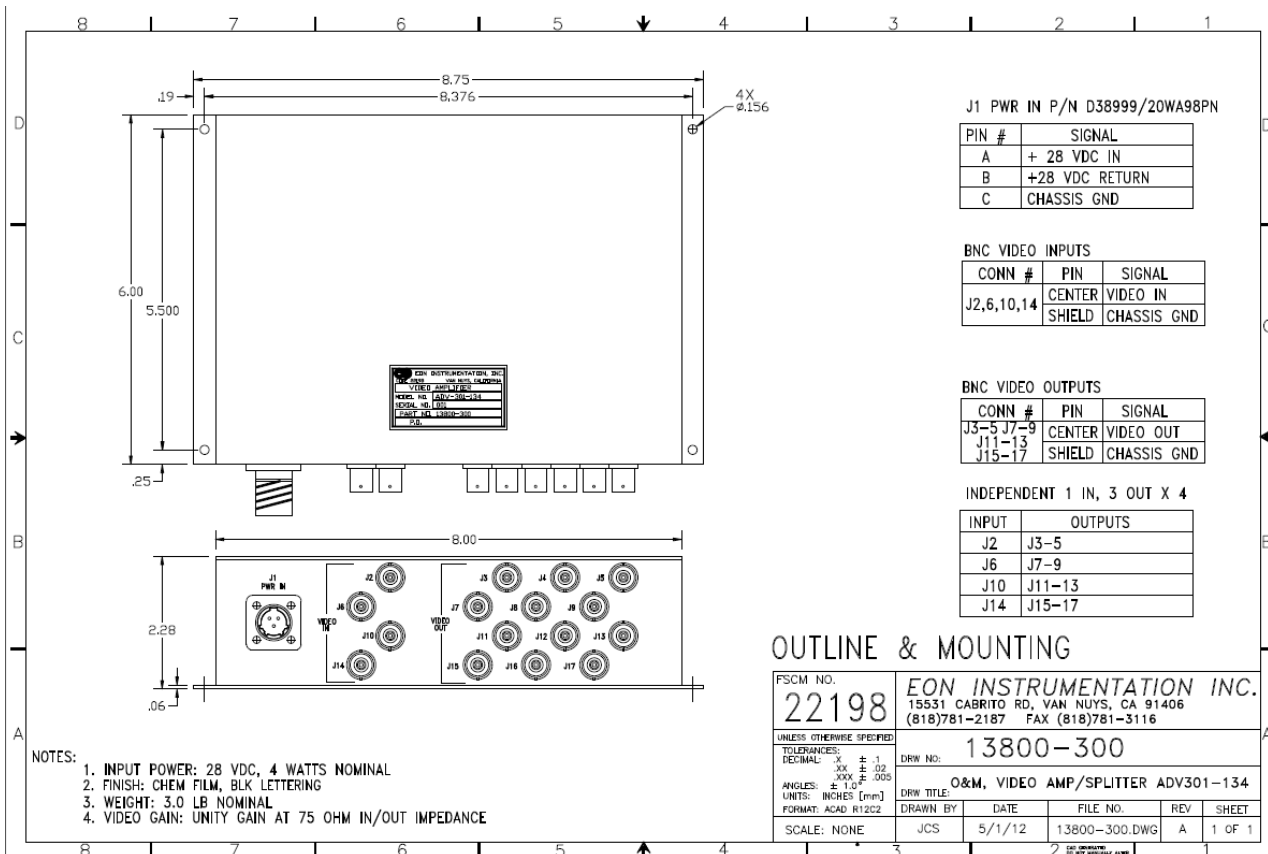
Outline and Mounting Drawings:



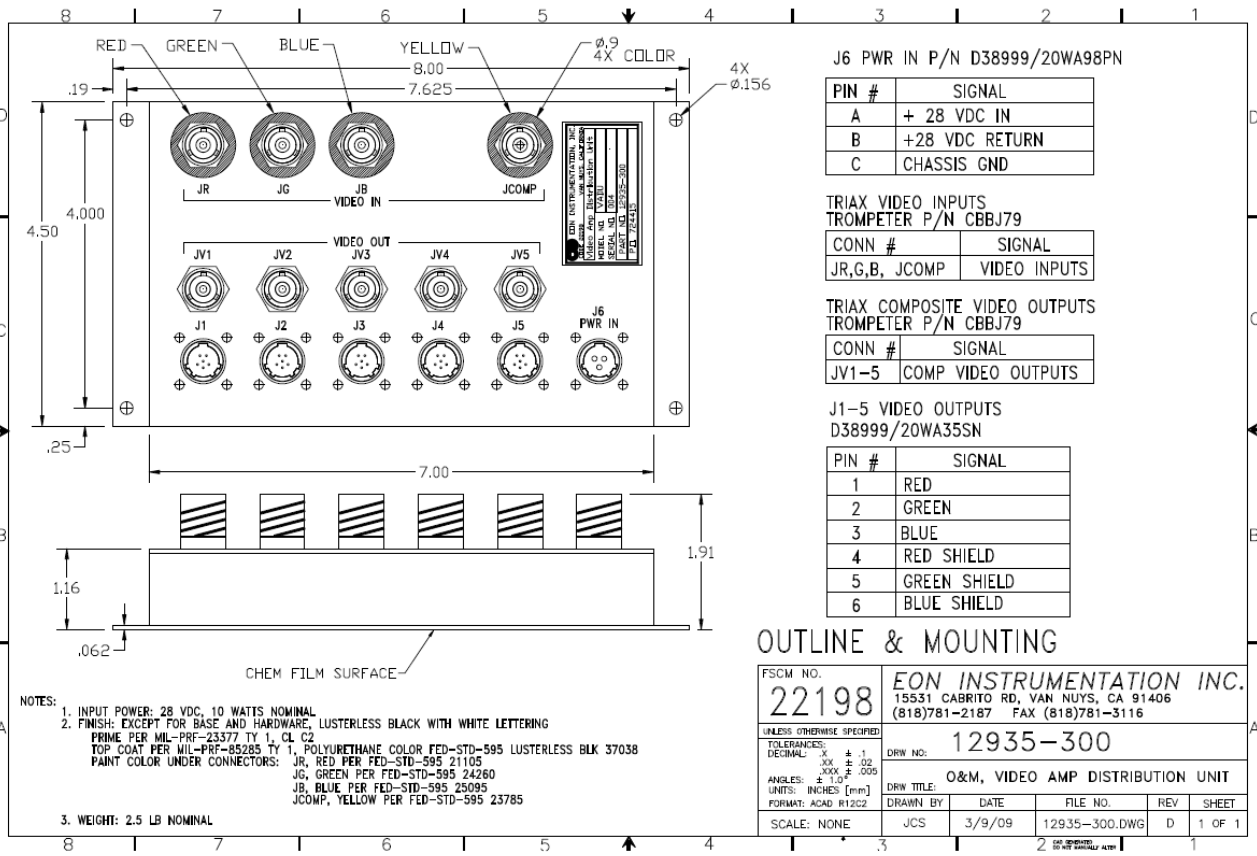
ADV-301-123 Outline and Mounting Drawing



ADV-301-133 Outline and Mounting Drawing



ADV-301-134 Outline and Mounting Drawing



ADV-301-31 Outline and Mounting Drawing

Connector Specifications:

Model	-31	-123	-133	-134
Size – Inches	4.50 x 7.00 x 1.16	5.00 x 6.75 x 2.28	6.00 x 8.75 x 2.28	6.00 x 8.75 x 2.28
Weight – lb's	2.0	3.0	3.0	3.0
Input Voltage	28 VDC	28 VDC	28 VDC	28 VDC
Inputs	4	3	3	4
Outputs	2 x 5	2 x 3	3 x 3	3 x 4
I/O Type	RGB or Single Ended	Single Ended	Single Ended	Single Ended
Connectors	D38999/ BNC	BNC/TNC	BNC/TNC	BNC/TNC