

DESCRIPTION

AMC MODEL ADVAN-218-30DD OPT. HS25NS, 5B, 816 IS A DIGITALLY VARIABLE ATTENUATOR OPERATING OVER A FREQUENCY RANGE OF 8 TO 16 GHz. THIS HIGH SPEED ATTENUATOR HAS A DYNAMIC RANGE OF 30 dB, AND USES 5 BIT BINARY CONTROL.

SPECIFICATIONS

- FREQUENCY RANGE: 8 TO 16 GHz
- INSERTION LOSS: 12 dB TYPICAL, 13 dB MAXIMUM @ 18 GHz
- DYNAMIC RANGE: 0 - 30 dB MINIMUM
- BIT ACCURACY: 1dB ATTENUATION STEPS ACCURATE WITHIN $\pm 25\%$ AT ANY FREQUENCY
- FLATNESS
 - 0 - 10 dB: ± 1.0 dB MAXIMUM
 - 10 - 30 dB: ± 4.0 dB MAXIMUM
- MONOTONICITY: GUARANTEED
- SPEED: 25 nS MAXIMUM
(TO WITHIN 0.5 dB OF FINAL ATTENUATION)
- TEMPERATURE STABILITY: < 0.02 dB/DEGREES C
- LINEARITY: $< 10\%$ DIFFERENCE FROM BEST FIT LINE
- CONTROL: 5-BIT BINARY
- CONNECTORS
 - RF: SMA FEMALE
 - CONTROL: DA-15P WITH JACK POST
- POWER SUPPLY: ± 15 VDC OR +5, -15 VDC
- WEIGHT: 1.5 OUNCE TYPICAL

OPTIONS:

- 816 FREQUENCY RANGE 8 - 16 GHz
- HS25NS HIGH SPEED 25 nSEC
- 5B 5 BIT

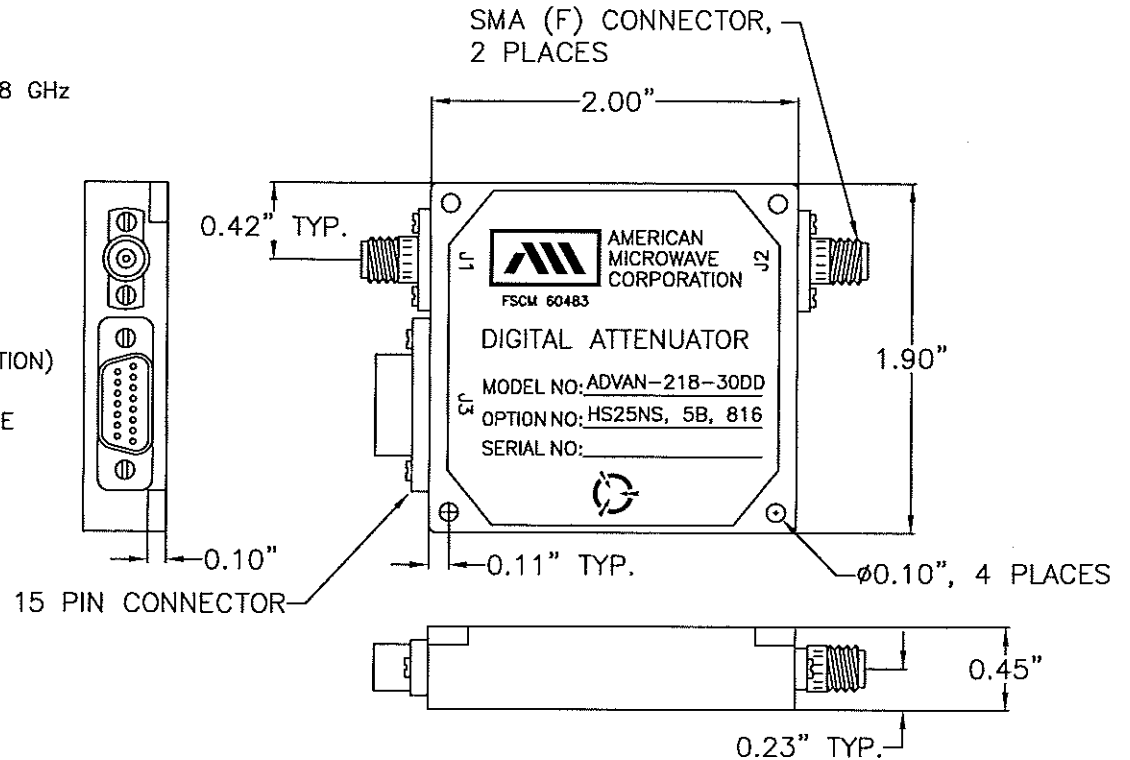
ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO $+85^{\circ}\text{C}$ (OPERATING)
..... -65°C TO $+125^{\circ}\text{C}$ (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

| REVISIONS | | | | |
|-----------|------|---------------------------------|---------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | - | ORIGINAL RELEASE JOB# 801002DPP | 1/17/08 | |



AMERICAN MICROWAVE CORPORATION

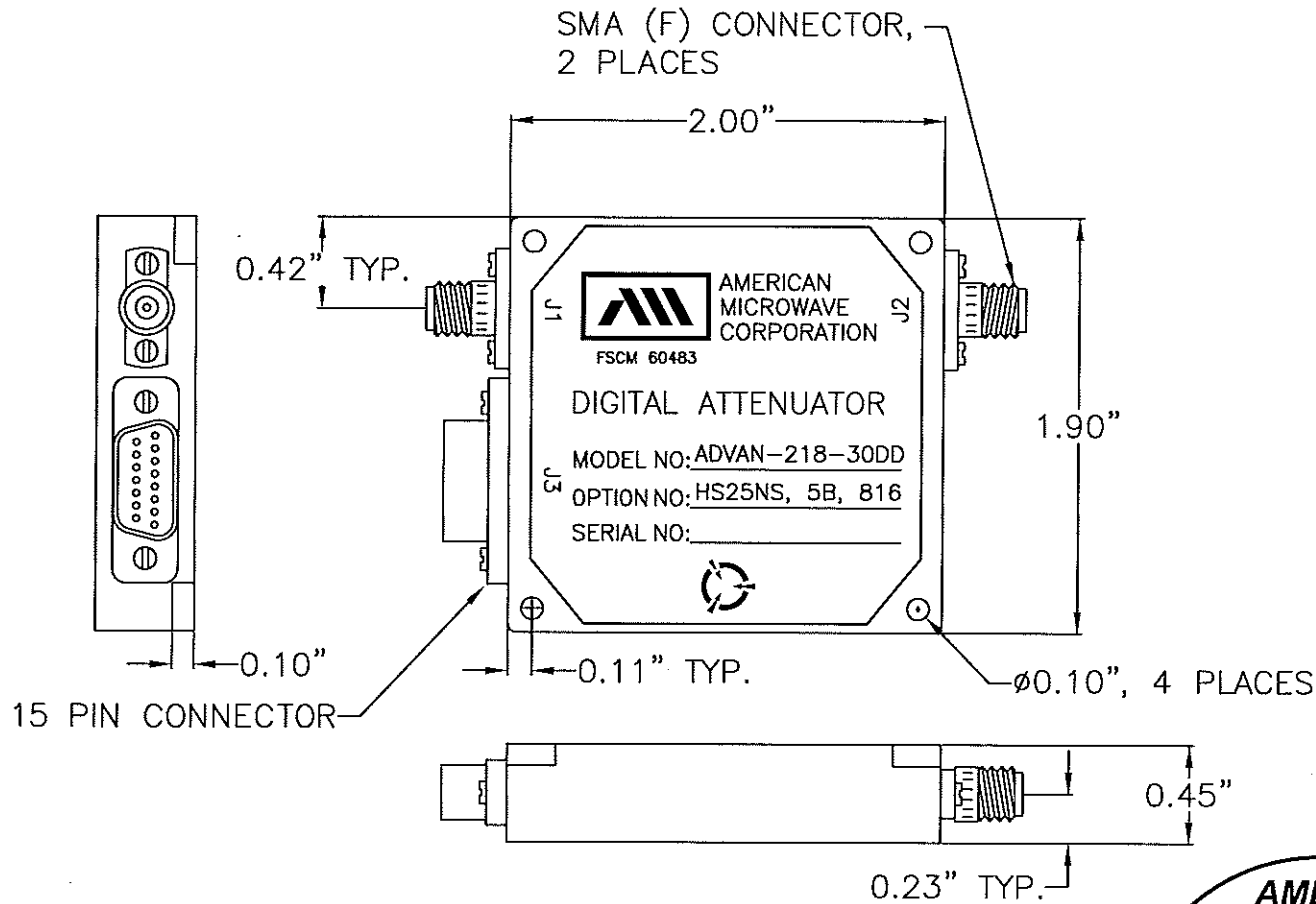
7311-G GROVE ROAD
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ISO 9001:2000 CERTIFIED



| APPROVALS | | DATE | TITLE | | | REV. |
|---------------------|--|---------|--|-------------------|-----------------------|------|
| DRAWN <i>P.M.V.</i> | | 1/17/08 | PRODUCT FEATURE A-DVAN-218-30DD OPT. HS25NS, 5B, 816 8 - 16 GHz DIGITAL VARIABLE ATTENUATOR | | | - |
| CHECKED <i>LA</i> | | 1/17/08 | SIZE A | FSCM NO. 60483 | DWG NO. 100-7331-2 | - |
| ISSUED | | | SCALE N:S | SHEET 1 OF 3 | | |

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MECHANICAL OUTLINE

CONNECTIONS:

| PIN | CONNECTION |
|-----|------------|
| 1 | GND |
| 2 | -Vin |
| 3 | +Vin |
| 4 | A0 |
| 5 | A1 |
| 6 | A2 |
| 7 | A3 |
| 8 | A4 |
| 9 | N/C |
| 10 | N/C |
| 11 | A0GND |
| 12 | A1GND |
| 13 | A2GND |
| 14 | A3GND |
| 15 | A4GND |

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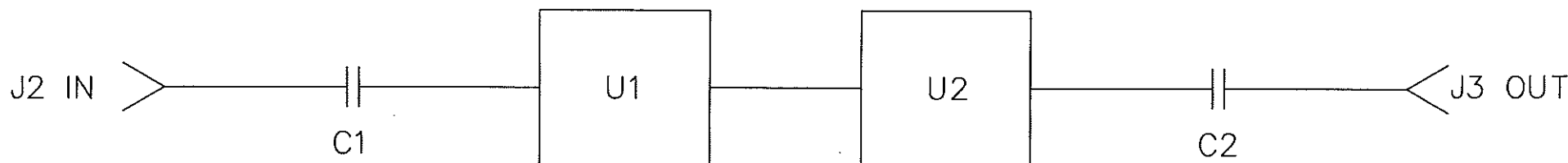
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010

| APPROVALS | | DATE | TITLE | | | |
|-------------------|---------|-----------|---|--------------------|--------|--|
| DRAWN <i>PMW</i> | | 1/17/08 | MECHANICAL OUTLINE A-DVAN-218-30DD OPT. HS25NS, 5B, 816 2 - 18 GHz DIGITAL VARIABLE ATTENUATOR | | | |
| CHECKED <i>PK</i> | 1/17/08 | SIZE A | FSCM NO. 60483 | DWG NO. 100-7331-2 | REV. - | |
| ISSUED | | SCALE N:S | SHEET 2 OF 3 | | | |

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FUNCTIONAL BLOCK DIAGRAM



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CONFIDENTIAL AND PROPRIETARY

| | | | | | |
|---------------------|----------|------------|--------------------------|--|--|
| APPROVALS | | DATE | TITLE | | |
| DRAWN <i>P.M.V.</i> | | 1/17/08 | FUNCTIONAL BLOCK DIAGRAM | | |
| CHECKED <i>pb</i> | | 1/17/08 | A-DVAN-218-30DD | | |
| ISSUED | | | OPT. HS25NS, 5B, 816 | | |
| SIZE | FSCM NO. | DWG NO. | REV. | | |
| A | 60483 | 100-7331-2 | - | | |
| SCALE N:S | | | SHEET 3 OF 3 | | |