

**DESCRIPTION:**

AMC MODEL DVAN-2040-63-8, OPTION: AL, 3F, 5 IS A 3.0 GHz, DIGITALLY VARIABLE ABSORPTIVE, PIN DIODE ATTENUATOR WITH REMOVABLE SMA CONNECTORS FOR SURFACE MOUNT CAPABILITY. IT IS CONTROLLED BY 8 BITS THROUGH A 15-PIN MULTIPIN CONNECTOR AND POWERED BY A ±15 VDC POWER SUPPLY.

| REVISIONS |      |                                |        |
|-----------|------|--------------------------------|--------|
| ZONE      | REV. | DESCRIPTION                    | DATE   |
| -         | -    | ORIGINAL RELEASE JOB# 403035-2 | 4/6/04 |

**SPECIFICATIONS:**

- FREQUENCY: 3.0 GHz ±500 MHz
- INSERTION LOSS: 2.0 dB MAX
- VSWR: 2.0:1 MAX
- FLATNESS
  - ⊙ 10 dB: ±0.45 dB
  - ⊙ 20 dB: ±0.8 dB
  - ⊙ 40 dB: ±1.5 dB
  - ⊙ 60 dB: ±1.6 dB
- DYNAMIC RANGE: 63 dB MIN
- DEVIATION FROM LINEARITY
  - 0 TO 30 dB: ±0.5 dB
  - 30 TO 50 dB: ±1.0 dB
  - 50 TO 60 dB: ±1.5 dB
- MONOTICITY: GUARANTEED
- SWITCHING SPEED: 500 ns MAX
- TEMPERATURE COEFFICIENT: ±0.025 dB/°C
- RF POWER RATINGS: +20 dBm OPERATING, +30 dBm SURVIVAL
- CONTROL: 8-BIT POSITIVE TRUE BINARY
- POWER SUPPLY: +15 VDC @ 150 mA MAX  
-15 VDC @ 75 mA MAX
- RF CONNECTORS: REMOVABLE SMA FEMALE
- POWER AND CONTROL CONNECTOR: 15-PIN MULTIPIN
- PHYSICAL DIMENSIONS: 2.0 x 1.80 x 0.5 in.
- WEIGHT: ≤4 oz.

**OPTIONS**

- AL: CUSTOM DESIGNED FOR
- 3F: FREQUENCY 3 GHz ± 500MHz
- 5: ±15 VDC SUPPLY VOLTAGE

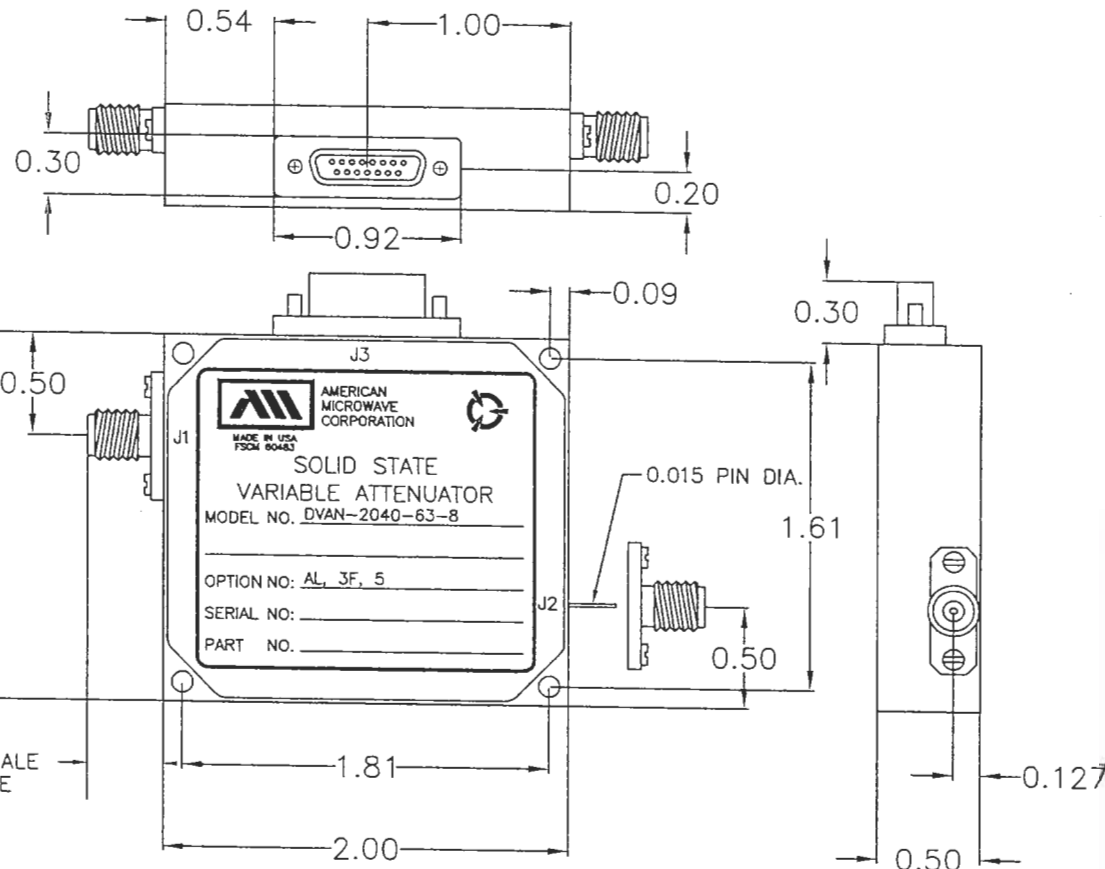
**MULTIPIN PINOUT**

- PIN 1: N\C
- PIN 2: N\C
- PIN 3: N\C
- PIN 4: GROUND
- PIN 5: 0.25 dB (LSB)
- PIN 6: 0.5 dB
- PIN 7: 1.0 dB
- PIN 8: 2.0 dB
- PIN 9: 4.0 dB
- PIN 10: 8.0 dB
- PIN 11: 16.0 dB
- PIN 12: 32.0 dB (MSB)
- PIN 13: +15 VDC
- PIN 14: -15 VDC
- PIN 15: N\C

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: IAW MIL-STD-202F, METHOD 103B CONDITION B
- SHOCK: IAW MIL-STD-202F, METHOD 312B CONDITION B
- VIBRATION: IAW MIL-STD-202F, METHOD 204D CONDITION B
- ALTITUDE: IAW MIL-STD-202F, METHOD 105C CONDITION B
- TEMPERATURE CYCLE: IAW MIL-STD-202F, METHOD 107D CONDITION A

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



ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.010  
X.XXX ±0.005

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ISO 9001:2000 CERTIFIED



| APPROVALS |            | DATE    | TITLE  |       |              |         |
|-----------|------------|---------|--|-------|--------------|---------|
| DRAWN     | <i>FKM</i> | 4/6/04  | PRODUCT FEATURE<br>DVAN-2040-63-8<br>OPTION: AL, 3F, 5 |       |              |         |
| REDRAWN   | <i>JDJ</i> | 8/10/04 | 3 GHz, 8-BIT DIGITALLY CONTROLLED PIN DIODE ATTENUATOR | SIZE  | FSCM NO.     | DWG NO. |
| ISSUED    | <i>ph</i>  | 7/2/04  | A  | 60483 | 100-6957     | REV: -  |
|           |            |         | SCALE  | N:S   | SHEET 1 OF 3 |         |