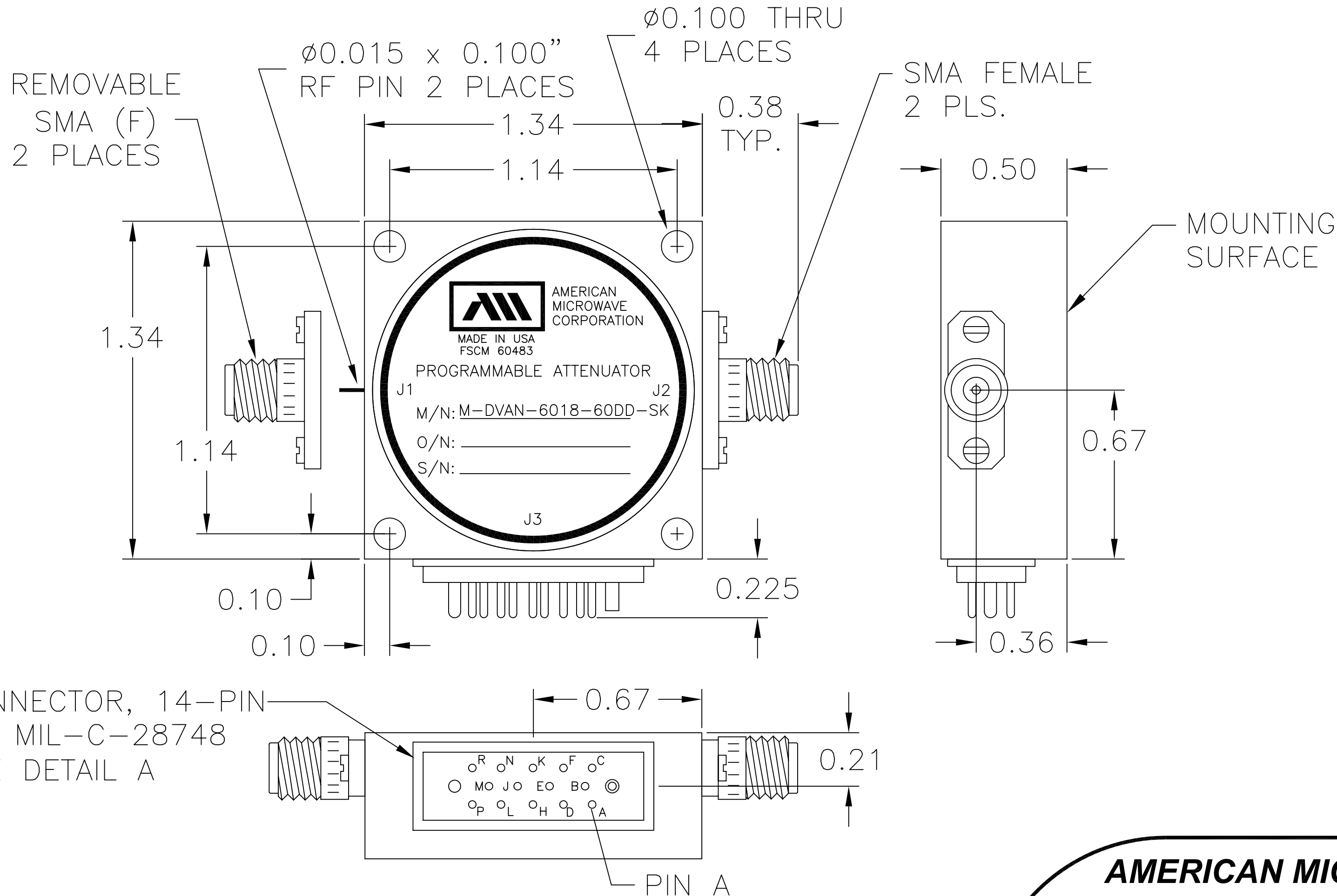


# DESCRIPTION

AMC MODEL M-DVAN-6018-60DD-SK IS A 6 TO 18 GHz FREQUENCY RANGE, HIGH SPEED VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 8 BIT BINARY LOGIC OR DRIVEN BY AN ANALOG POSITIVE VOLTAGE; UNIT IS PACKAGED IN A MINIATURE HERMETIC HOUSING FOR HIGH RELIABILITY APPLICATIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	8/09/06	



# MECHANICAL OUTLINE

J3 PIN FUNCTION	
PIN	FUNCTION
A	GND
B	Optional Latch En
C	-0 TO -15VDC
D	0.25dB (LSB)
E	0.5dB
F	1.0dB
H	4.0dB
J	2.0dB
K	16.0dB
L	32.0dB (MSB)
M	+12 TO +15VDC
N	8.0dB
P	GND
R	ANOLOG CONTROL

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

# AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD  
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E-MAIL: [sales@americanmicrowavecorp.com](mailto:sales@americanmicrowavecorp.com)  
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>JK</i>		8/09/06	MECHANICAL OUTLINE M-DVAN-6018-60DD-SK OPTION: 6-18 GHz, HIGH SPEED, VARIABLE ATTENUATOR		
CHECKED			SIZE A	FSCM NO. 60483	DWG NO. 100-7699
ISSUED			SCALE N:S		REV. -
					SHEET 2 OF 3

## DESCRIPTION

AMC MODEL M-DVAN-6018-60DD-SK IS A 6 TO 18 GHz FREQUENCY RANGE, HIGH SPEED VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 8 BIT BINARY LOGIC OR DRIVEN BY AN ANALOG POSITIVE VOLTAGE; UNIT IS PACKAGED IN A MINIATURE HERMETIC HOUSING FOR HIGH RELIABILITY APPLICATIONS.

## SPECIFICATIONS

- FREQUENCY RANGE: 6 TO 18 GHz
- INSERTION LOSS: 3.7 dB MAXIMUM
- ATTENUATION FLATNESS:
  - @ 10 dB = ± 1.5 dB
  - @ 20 dB = ± 2.0 dB
  - @ 40 dB = ± 2.5 dB
  - @ 60 dB = ± 3.5 dB
- ATTENUATION ACCURACY:
  - 0-30 dB = ± 0.5 dB
  - 30-50 dB = ± 1.0 dB
  - 50-60 dB = ± 1.5 dB
- MONOTONICITY: GUARANTEED
- TEMPERATURE VARIATION:
  - ± 1dB -10 to 85 deg C Typ
  - ± 2dB -40 to 95 deg C Typ
- SWITCHING TIME: 500 nSec MAXIMUM
- VSWR: 2.9:1 MAXIMUM
- POWER RATING: +20 dBm CW OR PEAK
- CONTROL:
  - DIGITAL: 8 BIT TTL
  - ANALOG: 0.25 dB MINIMUM ATTENUATION STEP
  - 0-6V ANALOG VOLTAGE, 10dB/VOLT
- POWER SUPPLY:
  - +12V TO +15V @ 70 mA MAXIMUM
  - NEGATIVE SUPPLY IS OPTIONAL 0 TO -15V @ 2 mA MAXIMUM (may be omitted)
- CONNECTORS:
  - RF INPUT/OUTPUT: FIELD REPLACEABLE SMA (FEMALE)
  - POWER AND CONTROLS: MINIATURE 14 PIN MALE (MIL-C-28748)
  - MATING CONNECTOR (FEMALE) FURNISHED
- SIZE: 1.34" x 1.34" x 0.50"

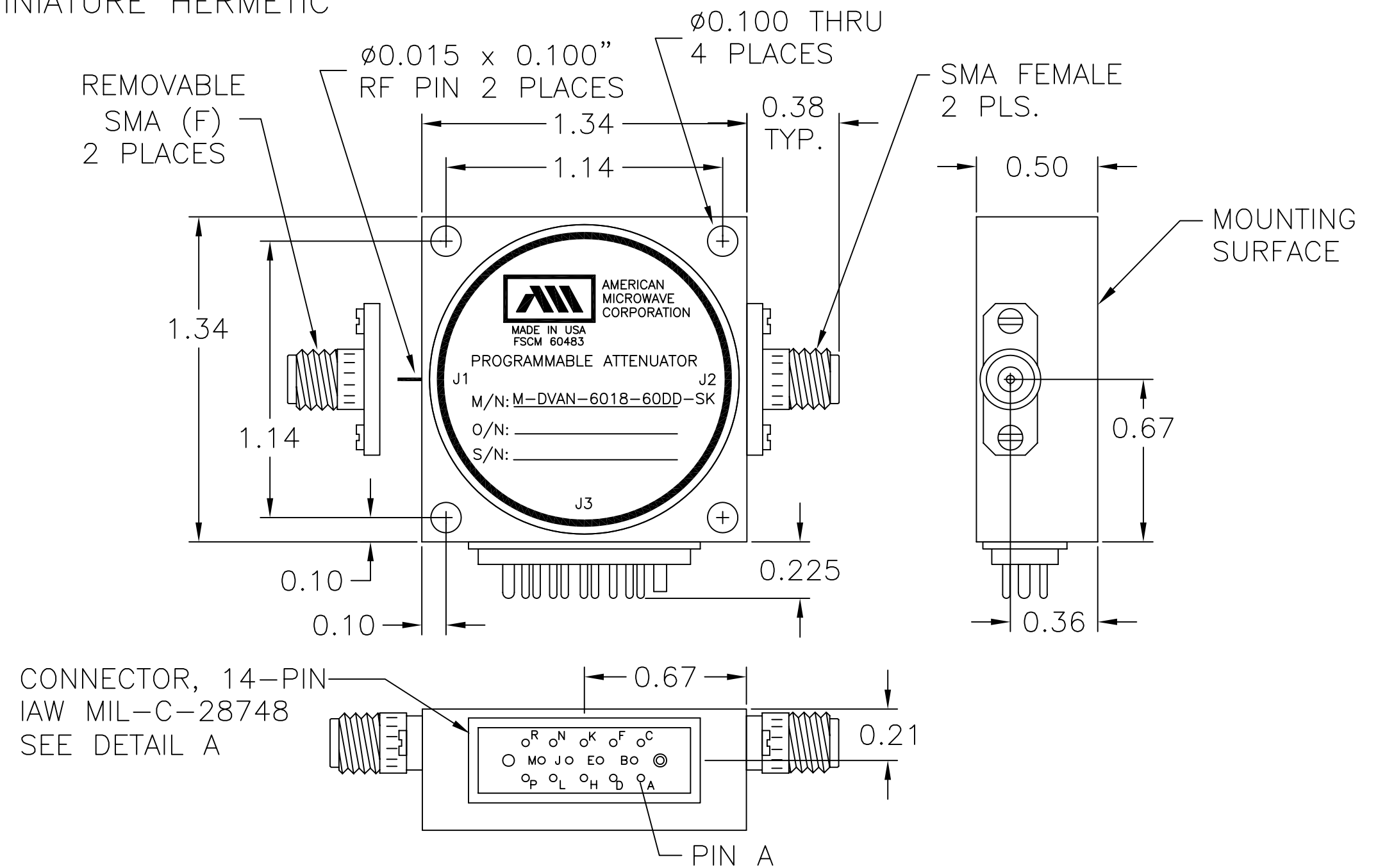
## OPTIONS

- 
- 

NOTE: Negative supply only for compatability with previous models  
 NOTE: Negative supply may be -V, or Ground or Open Circuit  
 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 ±0.010  
 X.XXX ±0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	8/09/06	



## ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +85°C (OPERATING)  
-65°C TO +125°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

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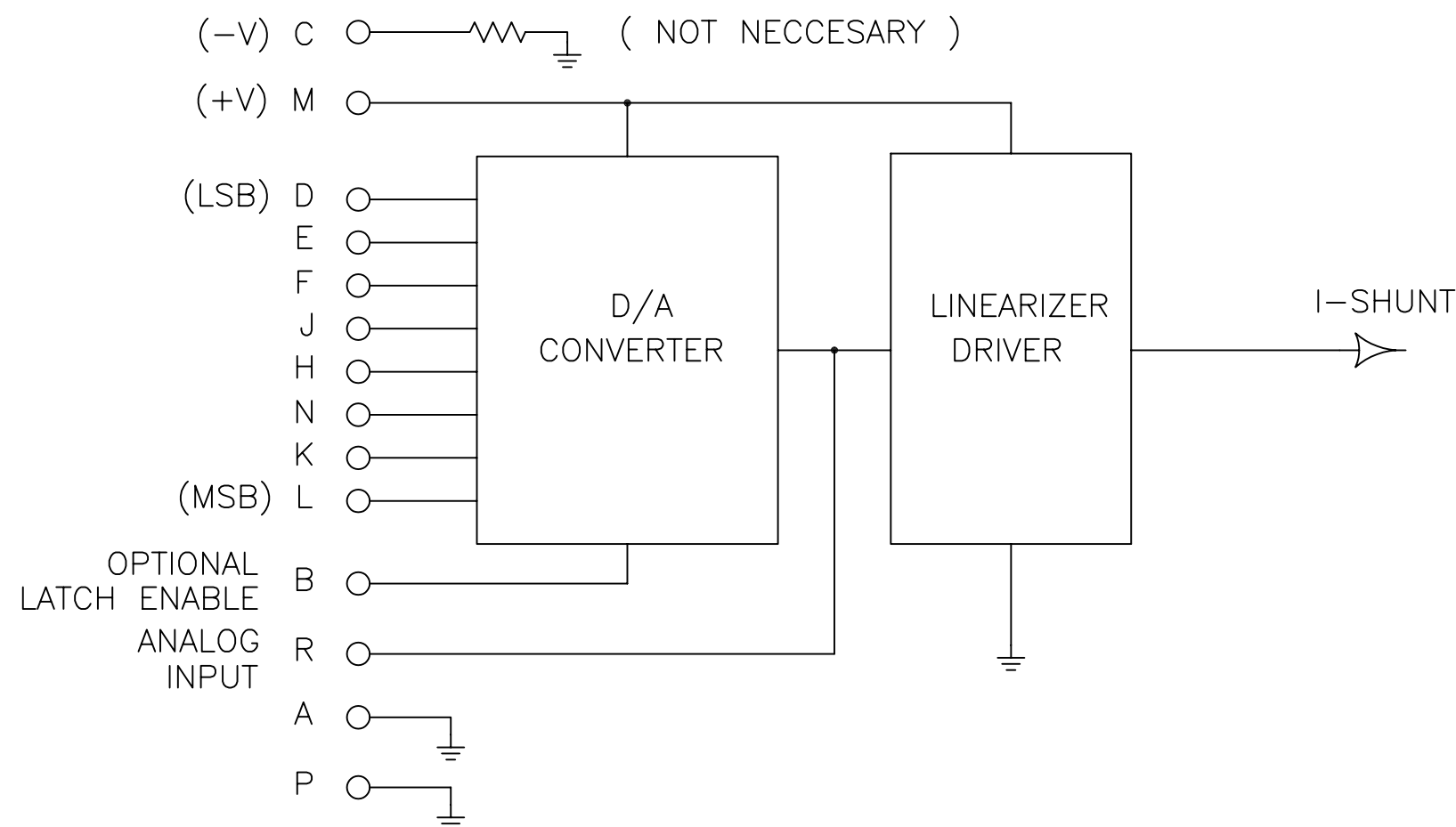
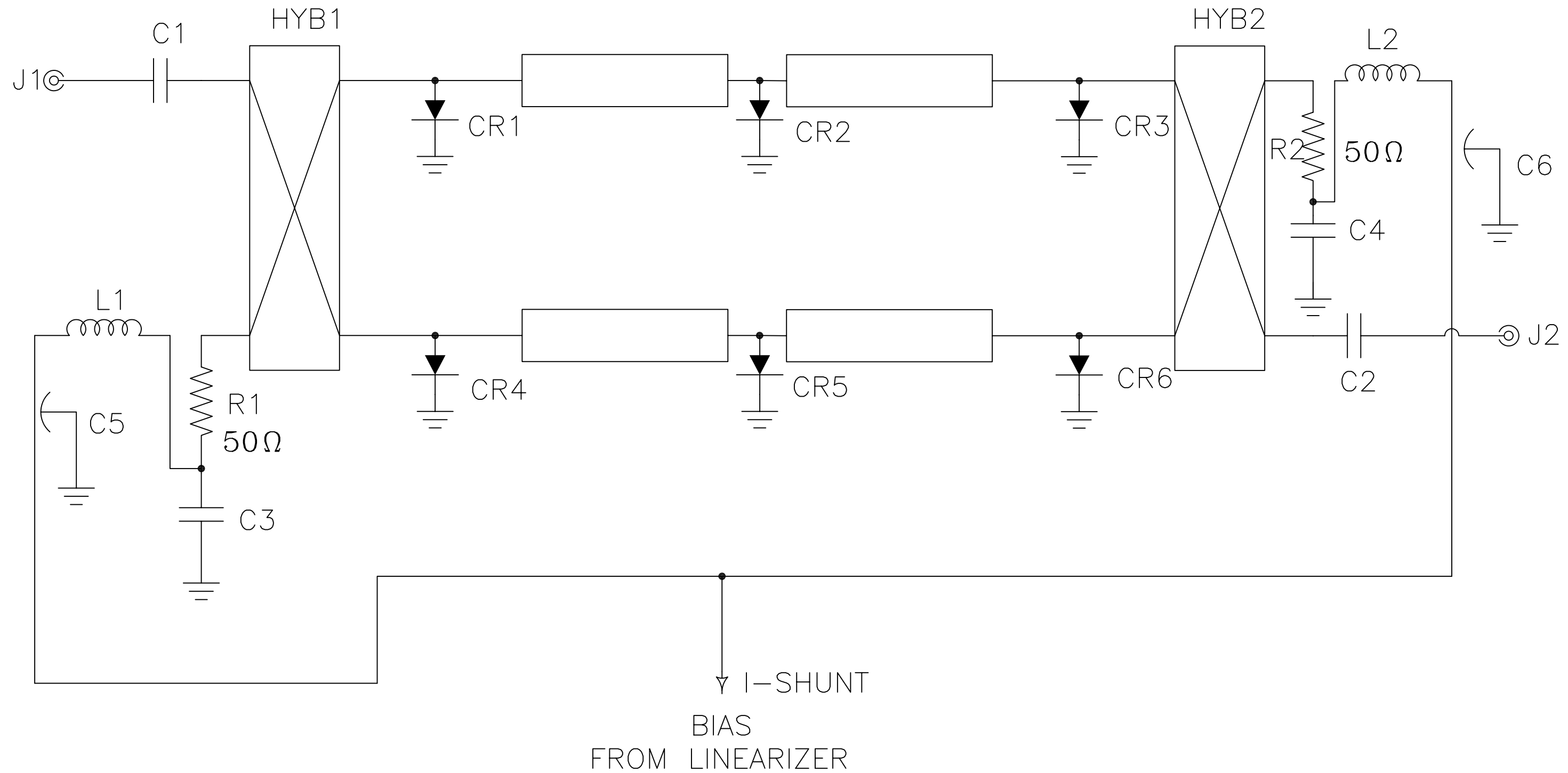
APPROVALS		DATE	TITLE		
DRAWN		8/09/06	PRODUCT FEATURE M-DVAN-6018-60DD-SK OPTION: 6-18 GHz, HIGH SPEED, VARIABLE ATTENUATOR		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7699
			SCALE	N:S	SHEET 1 OF 3

# DESCRIPTION

AMC MODEL M-DVAN-6018-60DD-SK IS A 6 TO 18 GHz FREQUENCY RANGE, HIGH SPEED VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 8 BIT BINARY LOGIC OR DRIVEN BY AN ANALOG POSITIVE VOLTAGE; UNIT IS PACKAGED IN A MINIATURE HERMETIC HOUSING FOR HIGH RELIABILITY APPLICATIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	8/09/06	

# FUNCTIONAL BLOCK DIAGRAM



CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE		
DRAWN <i>JK</i>		8/09/06	FUNCTIONAL BLOCK DIAGRAM M-DVAN-6018-60DD-SK OPTION: 6-18 GHz, HIGH SPEED, VARIABLE ATTENUATOR		
CHECKED			SIZE A	FSCM NO. 60483	DWG NO. 100-7699
ISSUED			SCALE N:S		REV. -
					SHEET 3 OF 3