



Advanced
Control
Components
Inc.

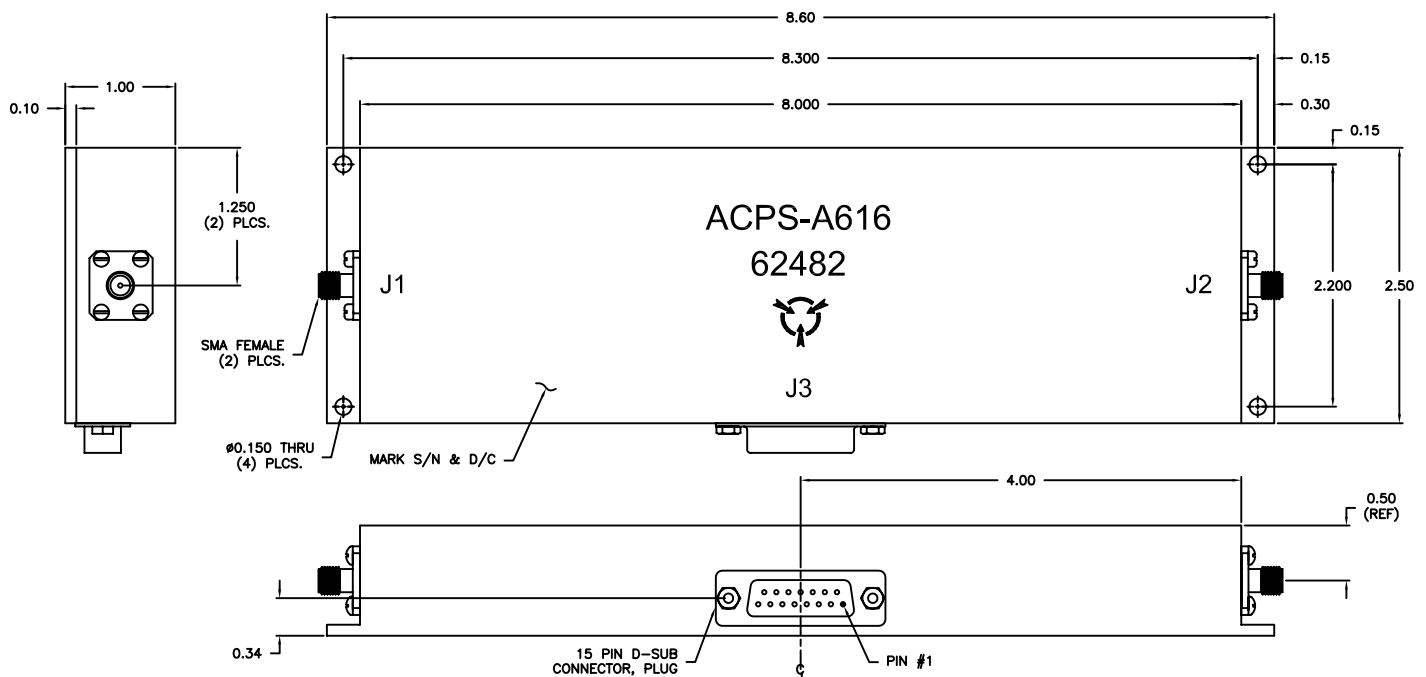
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PRODUCT SPECIFICATION
PART NUMBER: ACPS-A616
DESCRIPTION: PHASE SHIFTER, DIGITAL, 8-BIT, 1.4° LSB

FREQUENCY RANGE: 140 - 180 MHz
INSERTION LOSS: 6.5 dB MAX.
VSWR: 2.0 : 1 MAX. (50 OHM)
PHASE ACCURACY: $\pm 2.0^\circ$ @ 160 MHz
AMPLITUDE VARIATION VS. PHASE: ± 1 dB @ 160 MHz FOR ANY PHASE SETTING
SWITCHING TIME: 10 μ SEC. MAX.
POWER, OPERATING: +16 dBm MAX.
DC BIAS: +5V @ 100 mA MAX.
-15V @ 100 mA MAX.
PHASE CONTROL: TTL 0 = REFERENCE (0° PHASE)
TTL 1 = PHASE
E1 = 1.406° (LSB)
E2 = 2.813°
E3 = 5.625°
E4 = 11.25°
E5 = 22.5°
E6 = 45°
E7 = 90°
E8 = 180° (MSB)
TEMPERATURE STABILITY PHASE: $\pm 2.0^\circ$ OVER OPERATING TEMPERATURE RANGE
TEMPERATURE STABILITY, AMPLITUDE: ± 1 dB OVER OPERATING TEMPERATURE RANGE
TEMPERATURE (OPERATING): -20°C TO $+75^\circ\text{C}$
(STORAGE): -40°C TO $+85^\circ\text{C}$
RF CONNECTORS: SMA FEMALE
BIAS AND CONTROL: 15 PIN D-SUB CONNECTOR
FINISH: CHEM-FILM PER MIL-C-5541, CLASS 3

REV.	DESCRIPTION	DATE	APP'D
-	INITIAL RELEASE	6/99	
A	UPDATED TO NEW FORMAT	5/17/01	CP
B	CHANGED INS. LOSS FROM 10 TO 6.5 DB	5/12/2003	DW
C	UPDATED SPEC.	4/15/05	DW
D	UPDATED SPEC. / ADDED PIN DETAIL	6/1/05	RG

PIN NUMBER	FUNCTION
1	E1 (1.4°)
2	E2 (2.8°)
3	E3 (5.6°)
4	E1 (11.3°)
5	E5 (22.5°)
6	E6 (45°)
7	E7 (90°)
8	E8 (180°)
9	N/C
10	N/C
11	N/C
12	N/C
13	+5V
14	GND
15	-15V



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UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCES ON FINISH: RMS 63
ANGLES: $\pm 1/2^\circ$ FRACTIONS: $\pm 1/64$
4 PLACE DECIMALS: ± 0.0005
3 PLACE DECIMALS: ± 0.005
2 PLACE DECIMALS: ± 0.01

DRAWN BY: C PERRONE 5/17/01

APPROVED BY: R. GALLI 5/17/01

SHEET: 1 OF 1

FILECODE: ACPS-A616

SPEC SHEET REV -