



**AMERICAN MICROWAVE
CORPORATION**

TEST DATA

ON

7.5 TO 18.0 GHz

REFLECTIVE

SP6T

PIN DIODE SWITCH

"GOLDEN GATE"

MODEL No: SWN-6TDR-HM-ARG

Serial No: 6MS40908

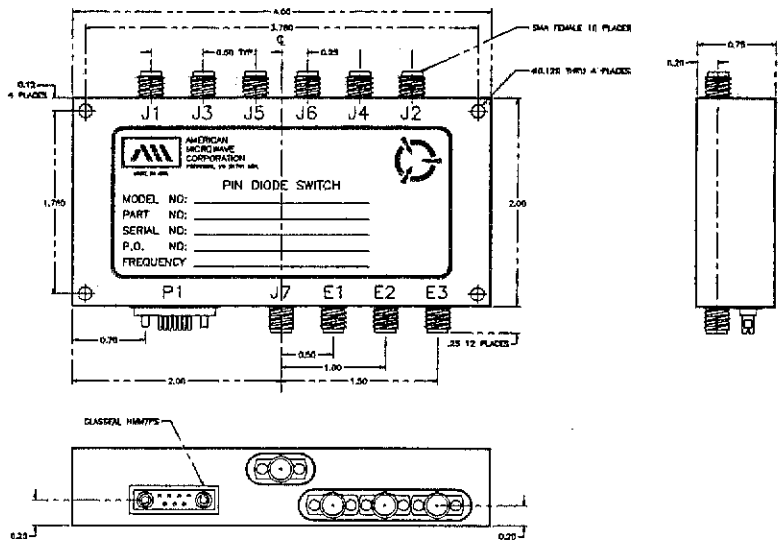
BY

**AMERICAN MICROWAVE
CORPORATION**

MAY 1, 1995

AMERICAN MICROWAVE CORPORATION

REFLECTIVE SP6T PIN DIODE SWITCH



- **LOW LOSS**
- **FAST SWITCHING**
- **BROADBAND**

"GOLDEN GATE" AMC MODEL No: SWN-6TDR-HM-ARG

SPECIFICATIONS:

- **FREQUENCY RANGE** : 7.5 TO 18.0 GHz (2.0 TO 18.0 GHz Available)
- **INSERTION LOSS** : 3.5dB MAX., 3.0dB Typical
- **ISOLATION** : 40dB MIN., 45dB Typical
- **VSWR** : 2.0:1
- **SWITCHING SPEED** : RISE/FALL : 10nS Max.
: ON/OFF : <100nS Max.
- **DC POWER SUPPLY** : +5vdc @ 100mA Max., -15vdc @ 100mA Max.
- **RF INPUT POWER** : +20dBm Operating
- **RF SURVIVAL POWER** : 1 Watt
- **CONTROL** : TTL with Integral Decoder
- **SIZE** : 4.00" X 2.00" X 0.75"

ABSORPTIVE AND OTHER BANDWIDTHS VERSIONS AVAILABLE

7311 G GROVE ROAD, FREDERICK, MARYLAND 21701 • Tel. (301) 662-4700 • Fax (301) 662-4938

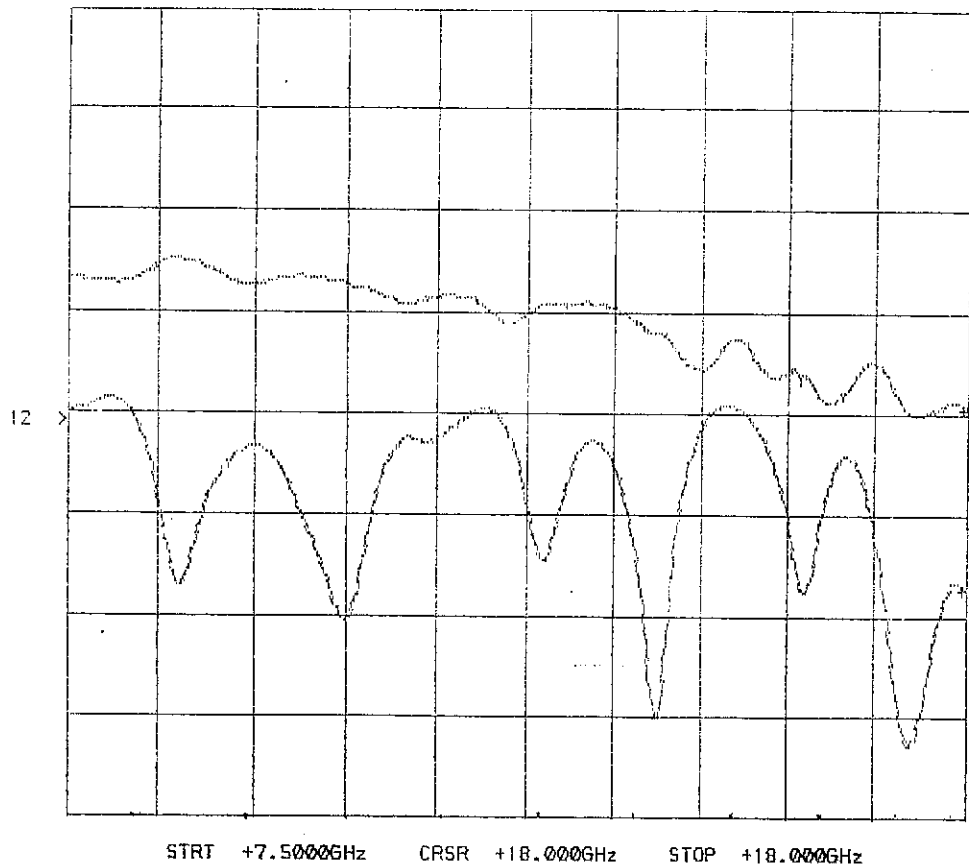


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J1

CH1: A -M - 2.96 dB CH2: B -M - 21.59 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



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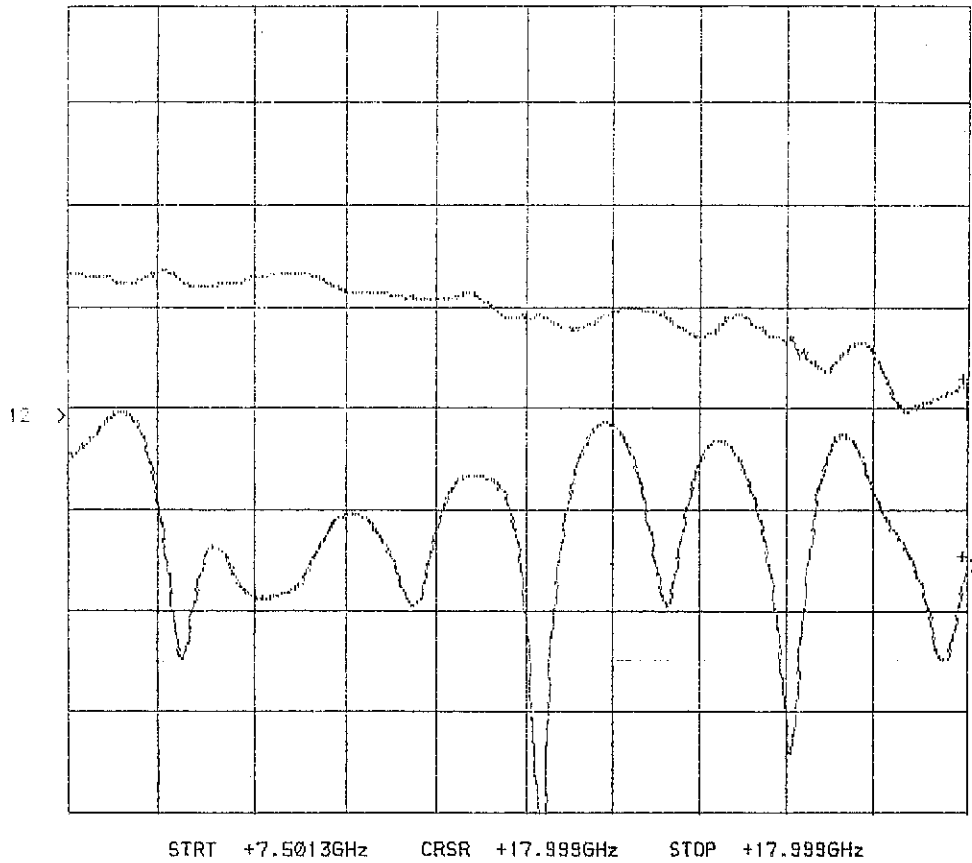


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J2

CH1: A -M - 2.73 dB CH2: B -M - 20.12 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



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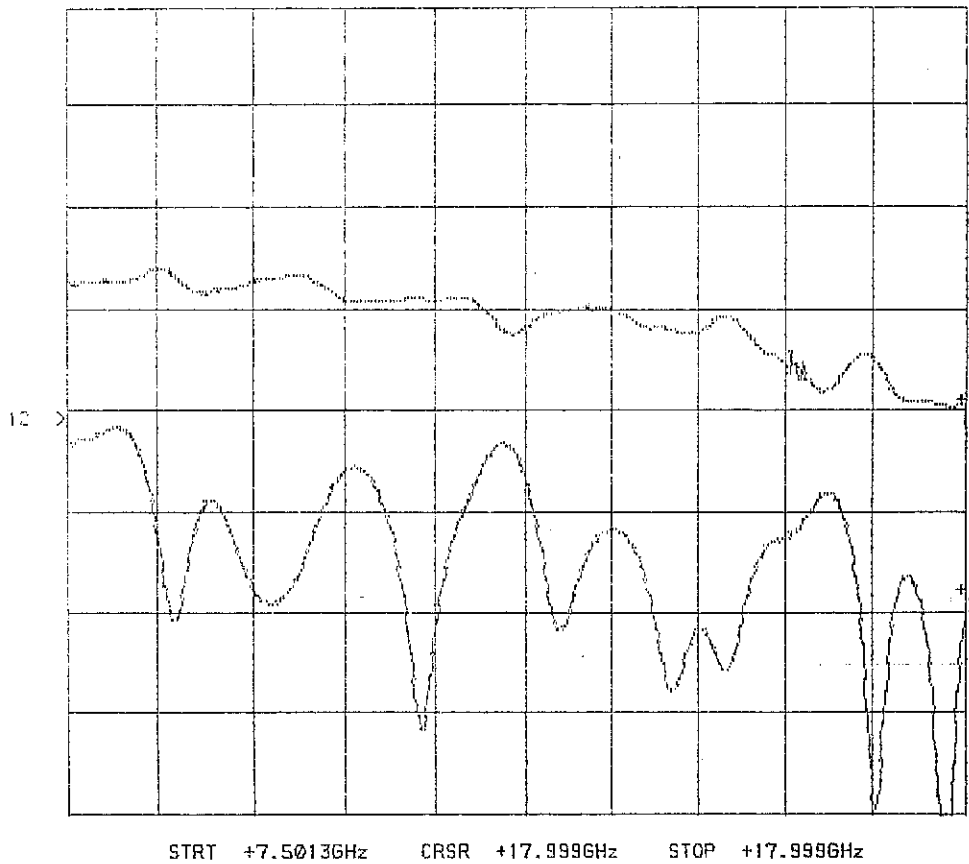


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J3

CH1: A -M - 2.91 dB CH2: B -M - 21.72 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



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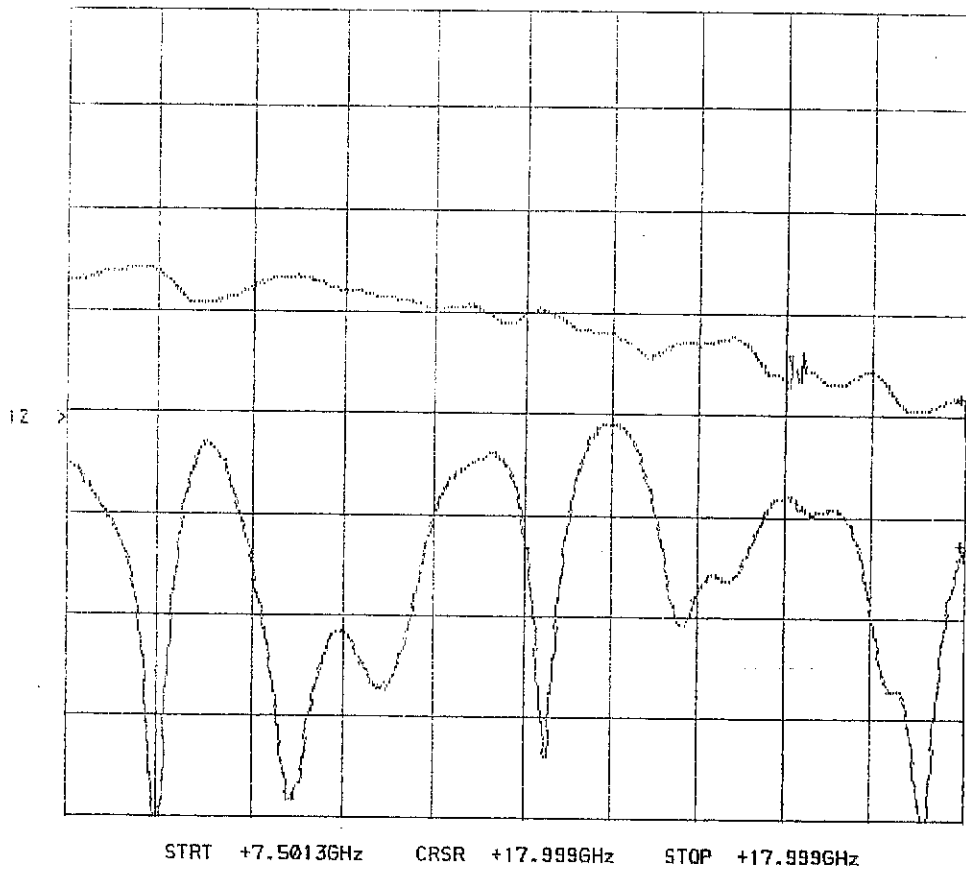


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J4

CH1: A -M - 2.95 dB CH2: B -M - 19.19 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



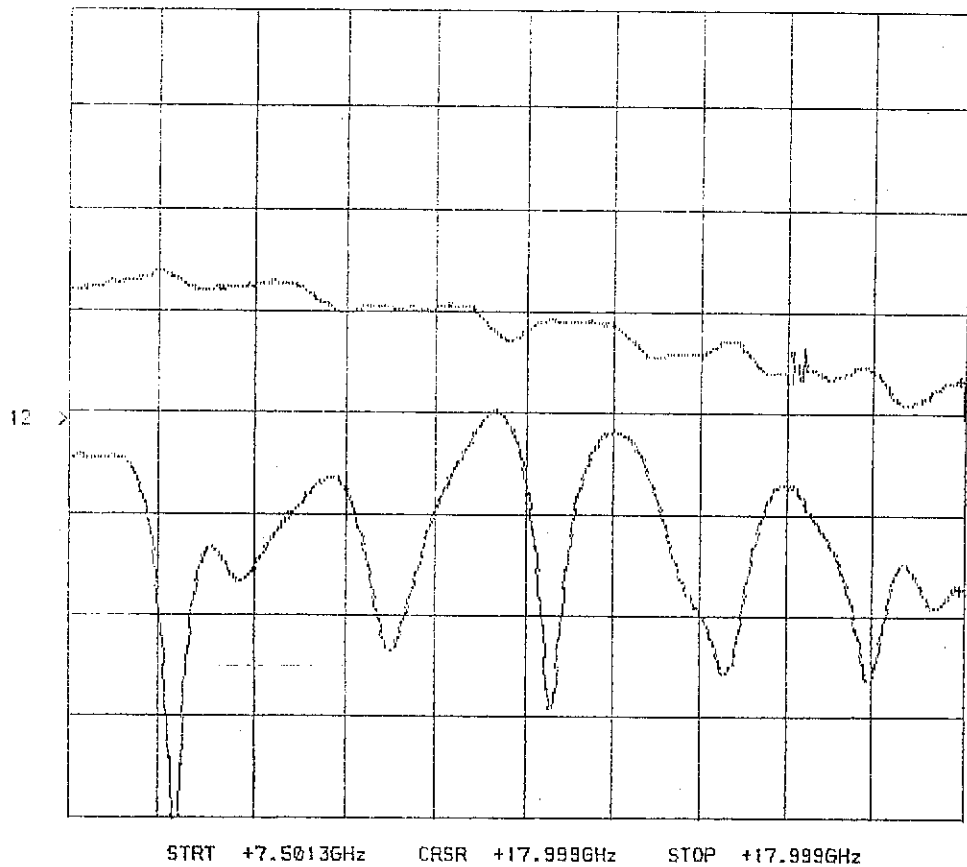
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SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J5

CH1: A -M - 2.69 dB CH2: B -M - 21.50 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



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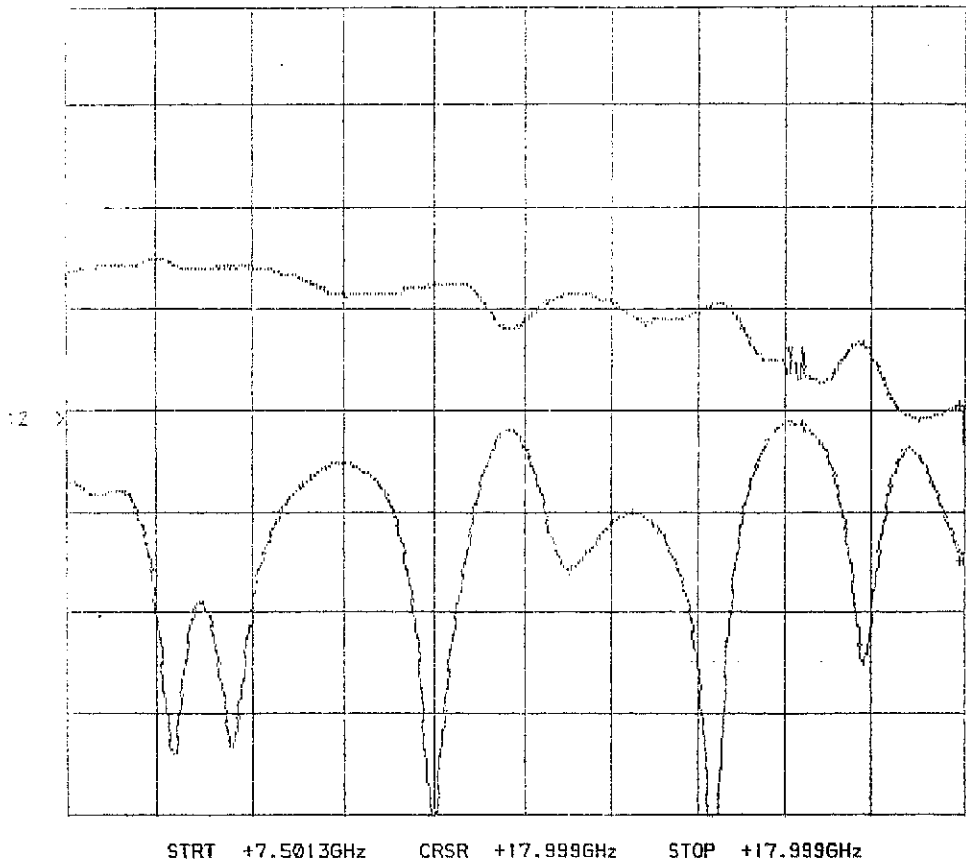


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

INSERTION LOSS vs. VSWR
(Measured From 7.5 to 18.0 GHz)

J7 TO J6

CH1: A -M - 2.97 dB CH2: B -M - 20.22 dB
1.0 dB/ REF - 3.00 dB 5.0 dB/ REF - 12.74 dB



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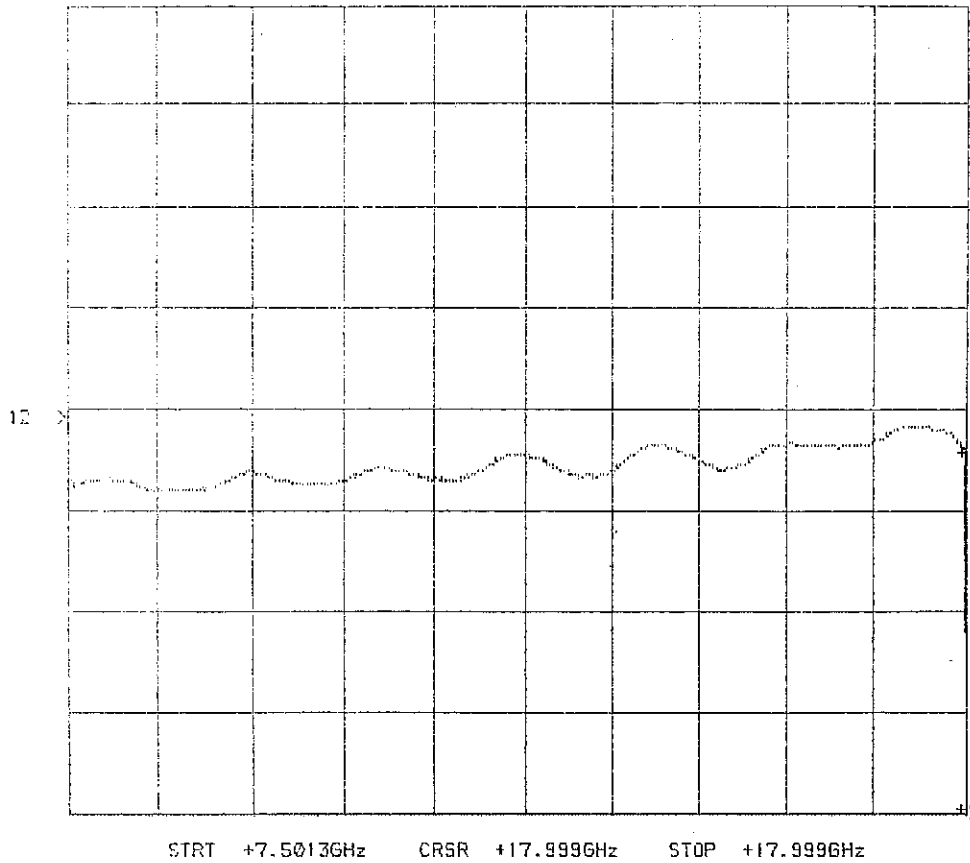


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J1

CH1: A -M S - 53.76 dB CH2: B -M - 49.50 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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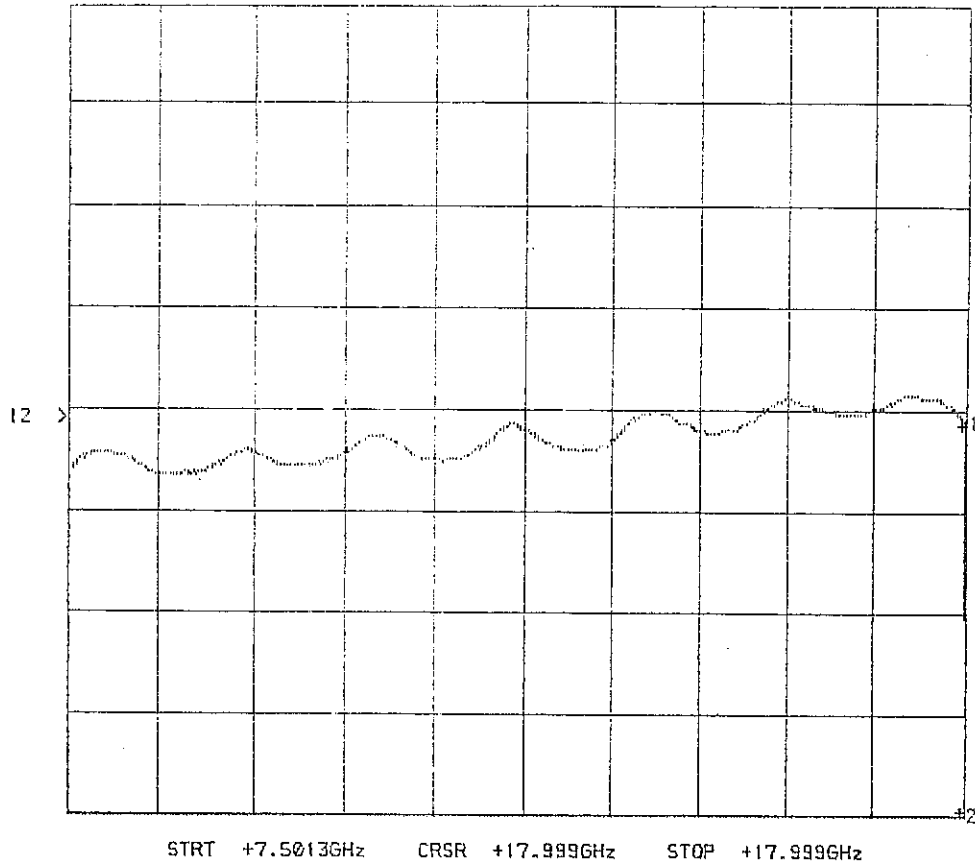


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J2

CH1: A -M S - 48.06 dB CH2: B -M - 47.36 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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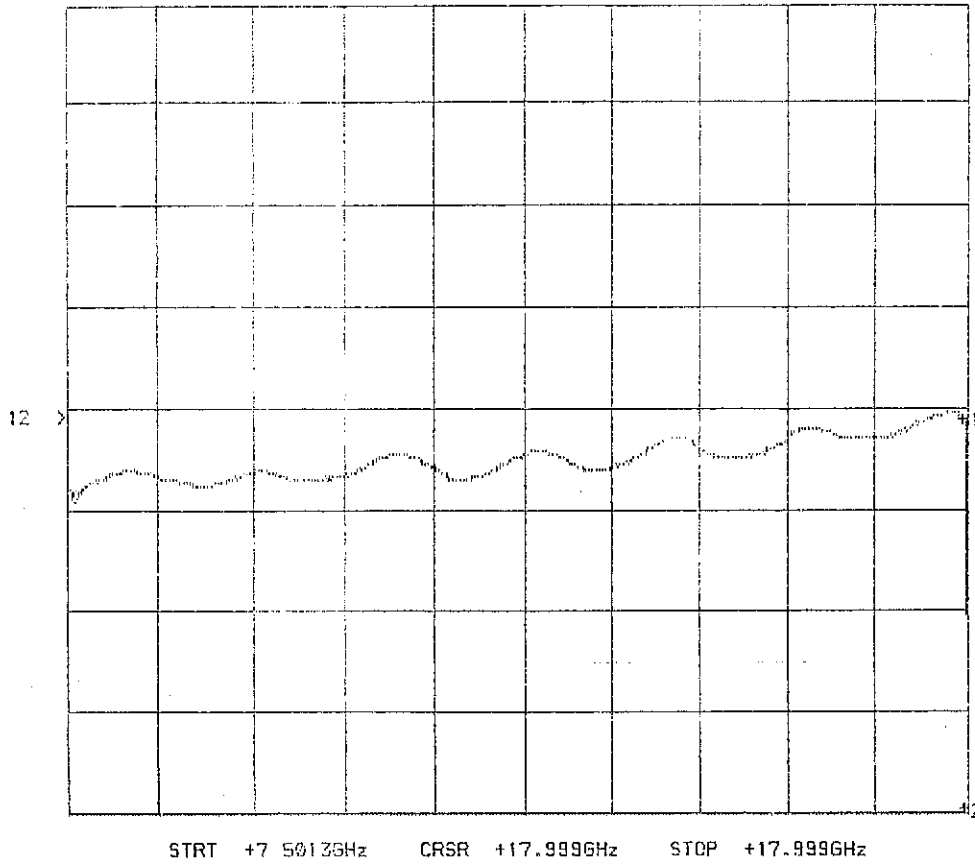


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J3

CH1: A -M S - 47.34 dB CH2: B -R - 47.75 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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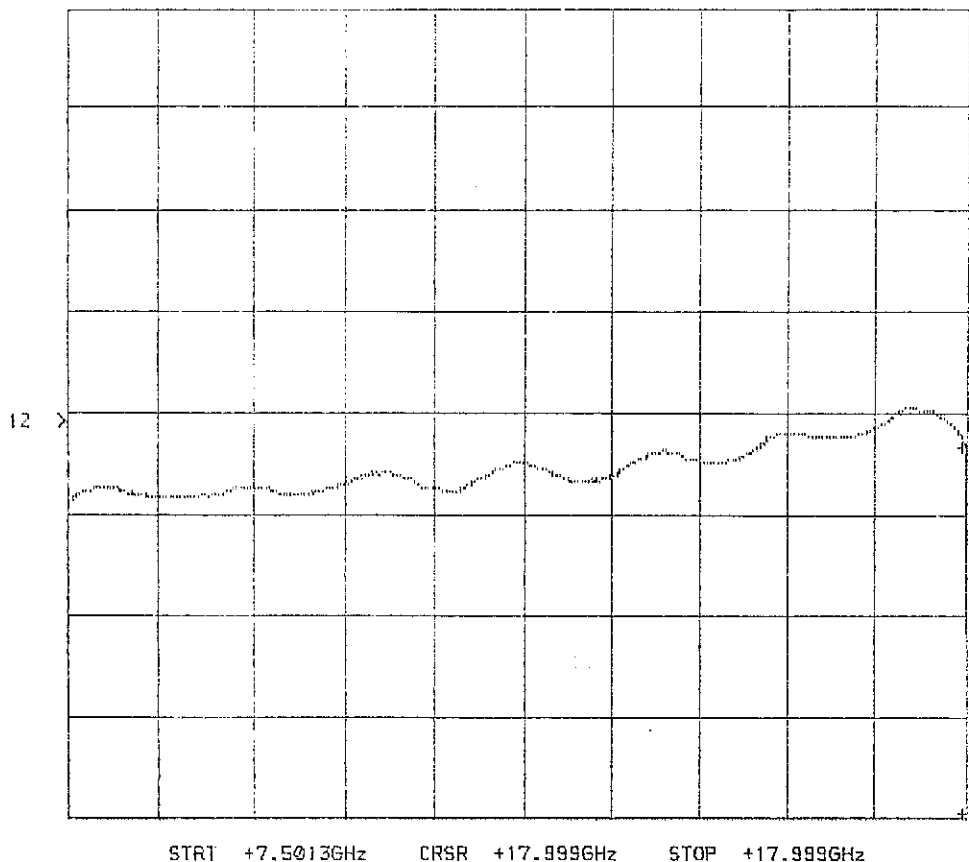


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J4

CH1: A -M S - 52.06 dB CH2: B -M - 45.17 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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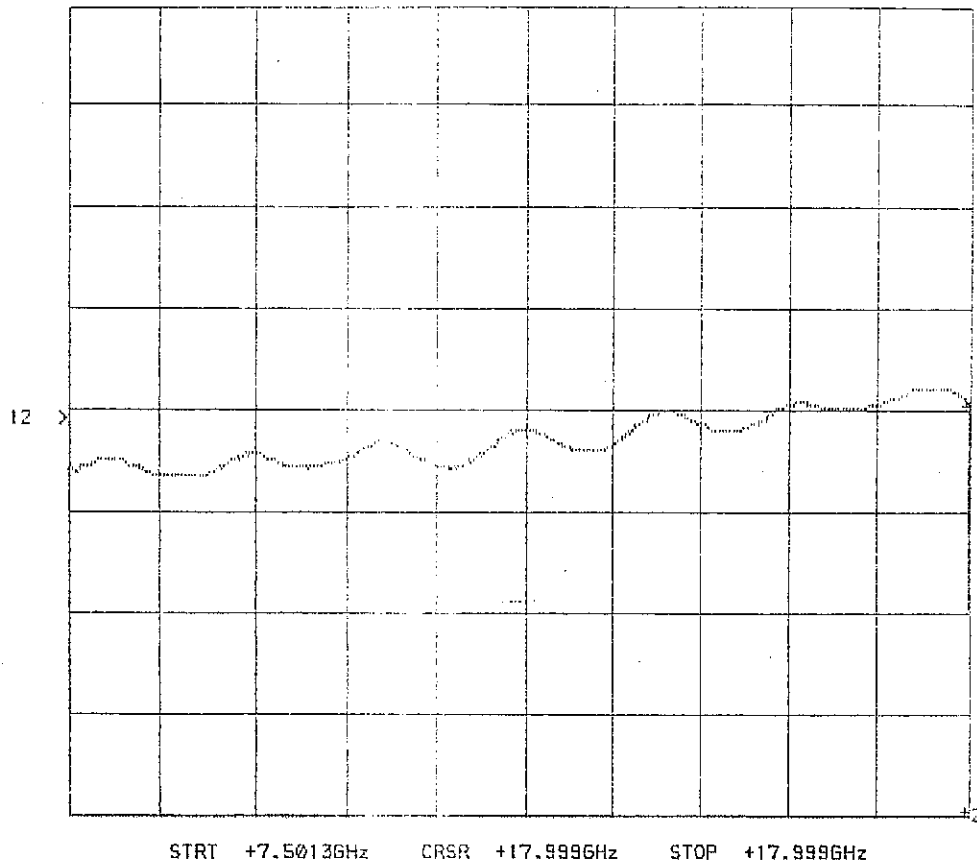


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J5

CH1: A -M S - 43.98 dB CH2: B -M - 52.45 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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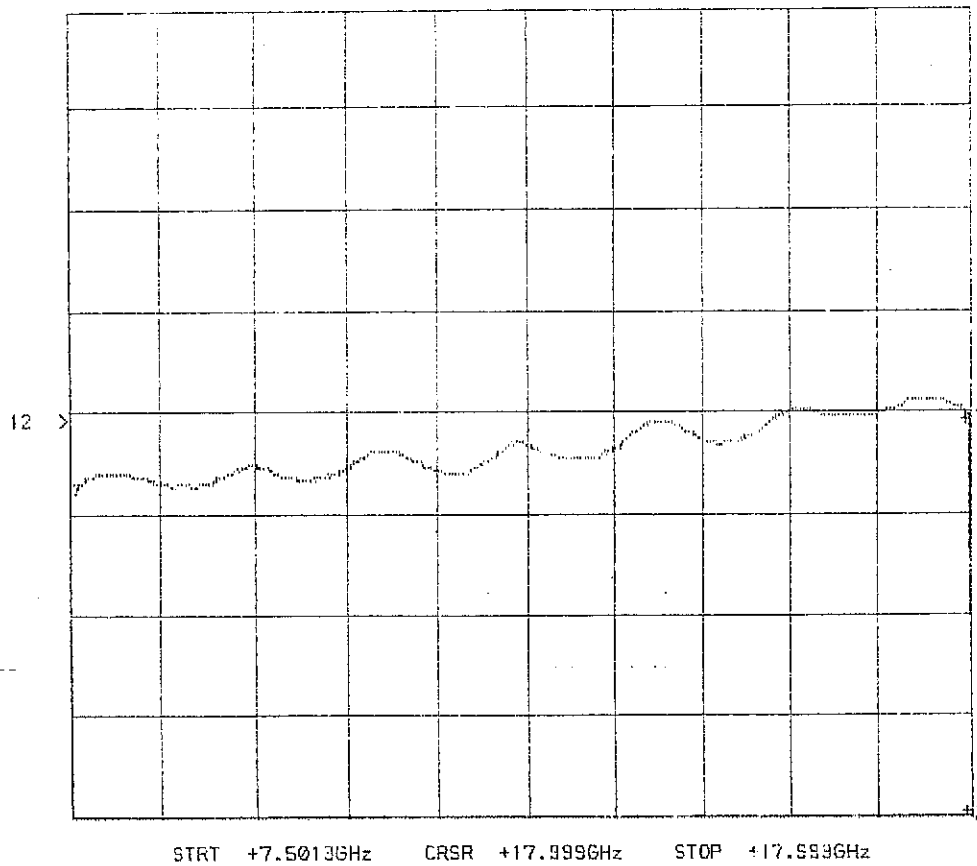


SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

ISOLATION
(Measured From 7.5 to 18.0 GHz)

J7 TO J6

CH1: A -M S - 46.83 dB CH2: B -M - 44.61 dB
20.0 dB/ REF - 45.00 dB 5.0 dB/ REF - 12.74 dB



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SERIAL NUMBER : 6MS40908
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 60mA
-15vdc @ 70mA

SWITCHING SPEED

- RISE TIME : 10% RF TO 90% RF
- FALL TIME : 90% RF TO 10% RF
- DELAY "ON" : 50% TTL TO 90% RF
- DELAY "OFF" : 50% TTL TO 10% RF

PORT	DELAY "ON"	RISE TIME	DELAY "OFF"	FALL TIME
J1	44nS	6nS(typical)	48nS	6nS(typical)
J2	40nS	6nS(typical)	50nS	6nS(typical)
J3	40nS	6nS(typical)	50nS	6nS(typical)
J4	40nS	6nS(typical)	40nS	6nS(typical)
J5	40nS	6nS(typical)	30nS	6nS(typical)
J6	44nS	6nS(typical)	30nS	6nS(typical)

*(nS=Nanosecond)

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