

WAVEGUIDE to COAXIAL TRANSITION

Model Name : **NRD60TS201**

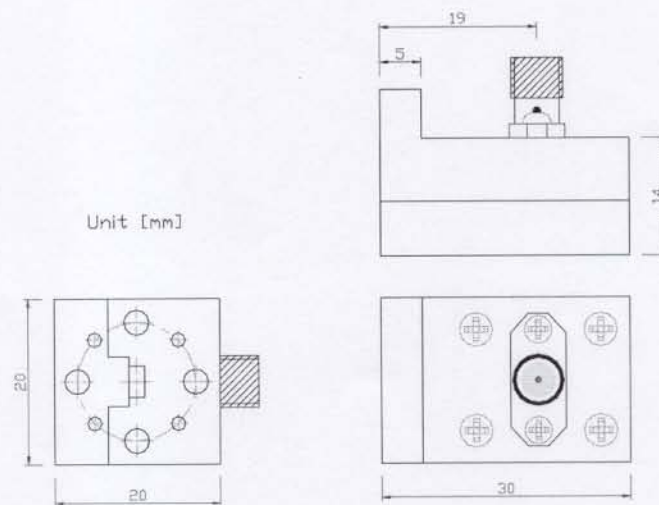
DATE: AUG/31/2002

Serial Number : **WV020831-01/ 02**

Specifications

Parameters	Specifications
Frequency Range	55GHz ~ 65GHz
Insertion Loss	0.5dB typical
Waveguide Port RL	15dB typical
Coaxial Port RL	12dB typical

Dimensions



Descriptions

1. V-band standard waveguide(WR-15) from/to Coaxial (V-connector) transition.

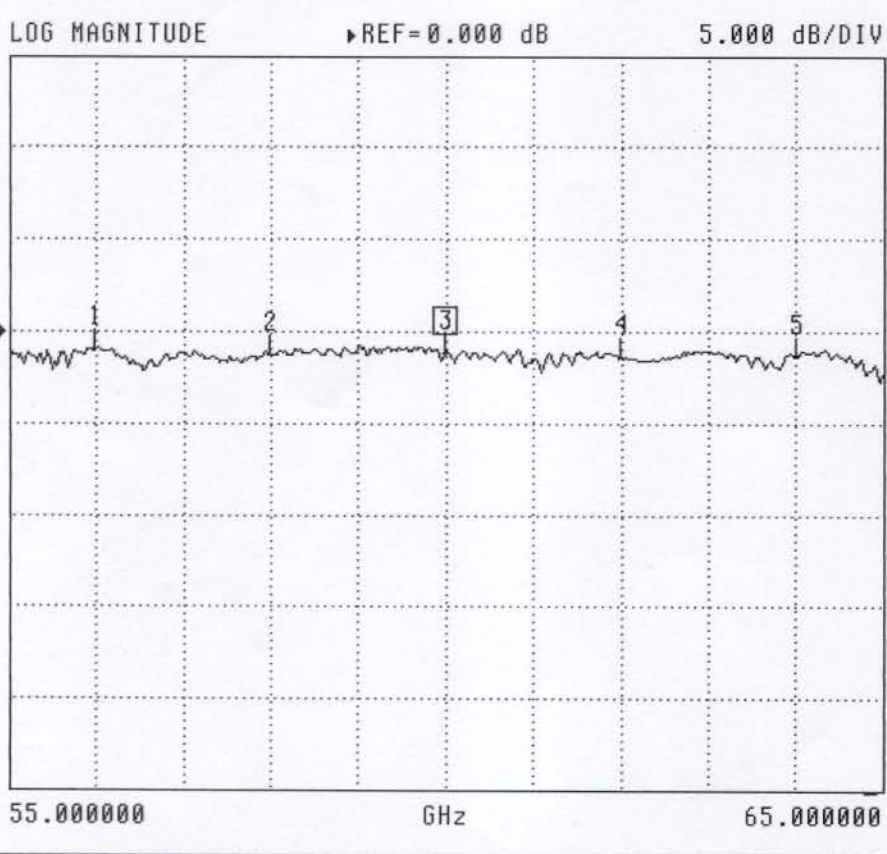
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MODEL: *NRD60TS201* DATE: 08/31/2002 18:23 Page 1
 DEVICE ID: *WV020831-01/02* OPERATOR: *Hyung Dong . Choi .*

START: 55.000000 GHz GATE START: - ERROR CORR: 12-TERM
 STOP: 65.000000 GHz GATE STOP: - AVERAGING: 1 PT
 STEP: 0.025000 GHz GATE: - IF BNDWDTH: 1 KHz
 * Straight (WR15) loss : -0.2dB WINDOW: -

-----CH3-----
 PARAMETER: -S21-
 NORMALIZATION: OFF
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S21 FORWARD TRANSMISSION



CH 3 - S21
 REFERENCE PLANE
 0.0000 mm

▶ MARKER 3
 60.000000 GHz
 -1.198 dB

MARKER TO MAX
 MARKER TO MIN

- 1 56.000000 GHz
-0.931 dB
- 2 58.000000 GHz
-1.235 dB
- 4 62.000000 GHz
-1.376 dB
- 5 64.000000 GHz
-1.390 dB

MARKER READOUT
 FUNCTIONS

* Description

- 1) V-Conn. Calibration은 하여 Back to Back 측정 후의 삽입 손실
- 2) Back to Back 측정시 WR15 straight 삽입. Straight 손실 0.2dB

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MODEL: NRD60TS201
 DEVICE ID: WVO20831-01/02

DATE: 08/31/2002 18:41
 OPERATOR: *hyung Dong Choi*

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START: 55.000000 GHz
 STOP: 65.000000 GHz
 STEP: 0.025000 GHz

GATE START: -
 GATE STOP: -
 GATE: -
 WINDOW: -

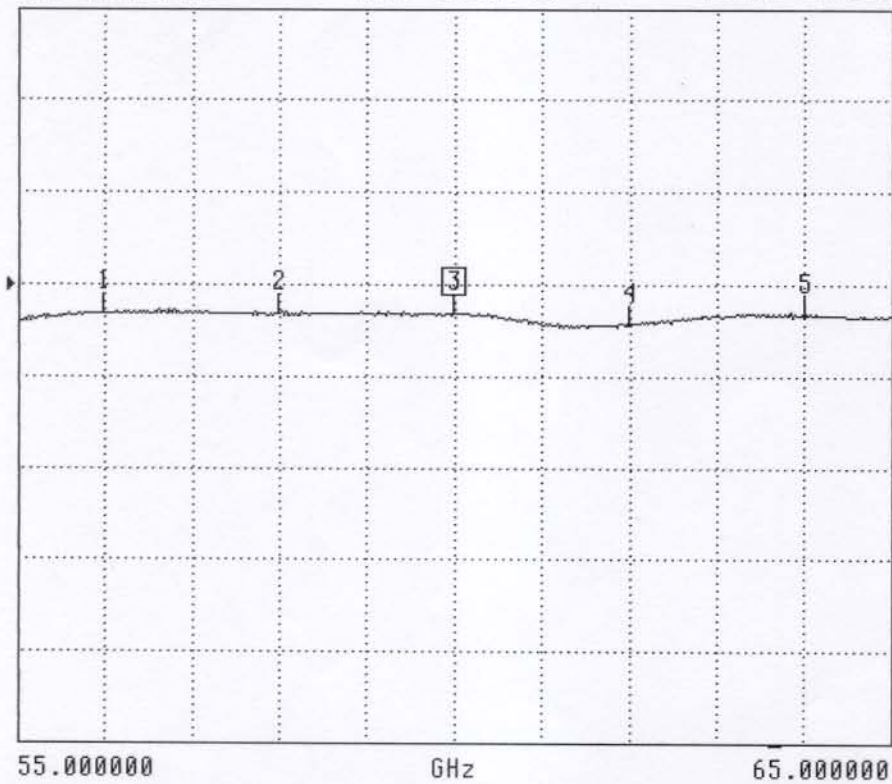
ERROR CORR: 12-TERM
 AVERAGING: 1 PT
 IF BNDWDTH: 1 KHz

* V-loss = -0.5dB

PARAMETER: CH3
 NORMALIZATION: -S21-
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S21 FORWARD TRANSMISSION

LOG MAGNITUDE REF=0.000 dB 5.000 dB/DIV



CH 3 - S21
 REFERENCE PLANE
 0.0000 mm

MARKER 3
 60.000000 GHz
 -1.589 dB

MARKER TO MAX
 MARKER TO MIN

- 1 56.000000 GHz -1.629 dB
- 2 58.000000 GHz -1.645 dB
- 4 62.000000 GHz -2.223 dB
- 5 64.000000 GHz -1.714 dB

MARKER READOUT
 FUNCTIONS

* Description

- 1) WR15 - Calibration을 새로 Back to Back 측정값과의 동일함
- 2) Back to Back (반대) V-loss. 동일. V-loss 한 0.5dB

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MODEL: *NRD60TS201* DATE: 08/31/2002 18:14 Page 1
 DEVICE ID: *WV020831-01* OPERATOR: *Hyung-Dong Chai*

START: 55.000000 GHz GATE START: - ERROR CORR: 12-TERM
 STOP: 65.000000 GHz GATE STOP: - AVERAGING: 1 PT
 STEP: 0.025000 GHz GATE: - IF BNDWDTH: 1 KHz
 WINDOW: -

-----CH1-----
 PARAMETER: -S11-
 NORMALIZATION: OFF
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S11 FORWARD REFLECTION

LOG MAGNITUDE REF=0.000 dB 5.000 dB/DIV



CH 1 - S11
 REFERENCE PLANE
 0.0000 mm

▶ MARKER 3
 60.000000 GHz
 -17.345 dB

MARKER TO MAX
 MARKER TO MIN

- 1 56.000000 GHz
-10.208 dB
- 2 58.000000 GHz
-13.917 dB
- 4 62.000000 GHz
-13.183 dB
- 5 64.000000 GHz
-10.903 dB

MARKER READOUT
 FUNCTIONS

* Description

1) Coax (U-low) port ~~to~~ R/L

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MODEL: *NRD 60TS201* DATE: 08/31/2002 18:37 Page 1
 DEVICE ID: *WV020831-01* OPERATOR: *hyung Dong, Choi*
 START: 55.000000 GHz GATE START: - ERROR CORR: 12-TERM
 STOP: 65.000000 GHz GATE STOP: - AVERAGING: 1 PT
 STEP: 0.025000 GHz GATE: - IF BNDWIDTH: 1 KHz
 WINDOW: -

PARAMETER: -----CH4-----
 NORMALIZATION: -S22-
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S22 REVERSE REFLECTION

LOG MAGNITUDE REF=0.000 dB 10.000 dB/DIV



CH 4 - S22
 REFERENCE PLANE
 0.0000 mm

MARKER 3
 60.000000 GHz
 -26.930 dB

MARKER TO MAX
 MARKER TO MIN

- 1 56.000000 GHz
-18.972 dB
- 2 58.000000 GHz
-22.522 dB
- 4 62.000000 GHz
-20.427 dB
- 5 64.000000 GHz
-14.003 dB

MARKER READOUT
 FUNCTIONS

X Description

U waveguide port R/L

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MODEL: *NRD60T301*
DEVICE ID: *WV020B21-02*

DATE: 08/31/2002 18:12
OPERATOR: *Hyung-Dong . Choi*

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START: 55.000000 GHz
STOP: 65.000000 GHz
STEP: 0.025000 GHz

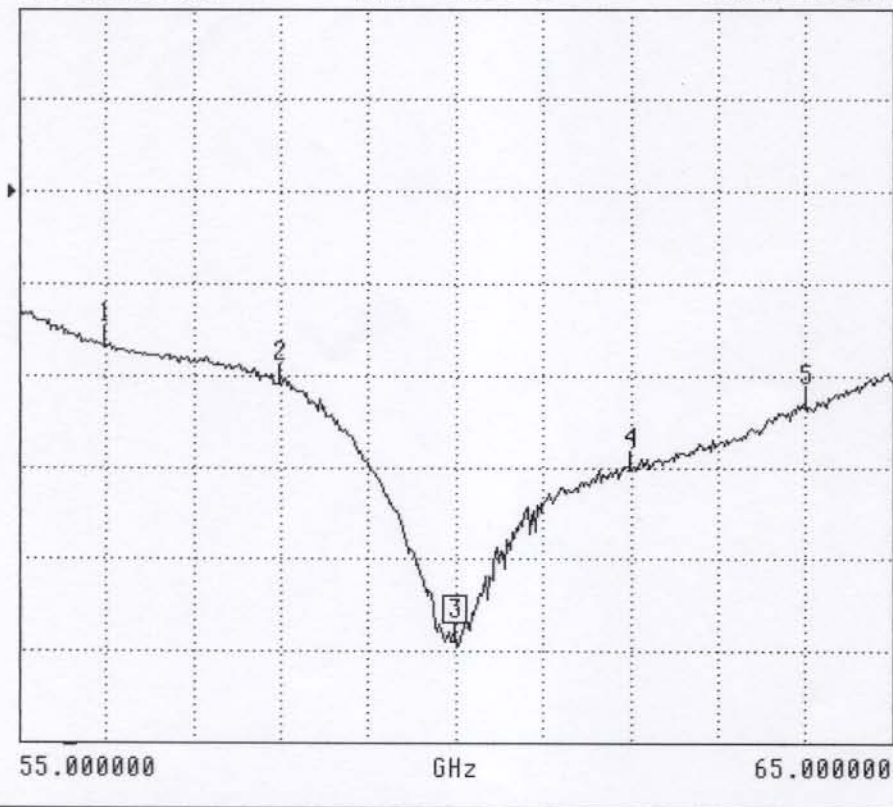
GATE START: -
GATE STOP: -
GATE: -
WINDOW: -

ERROR CORR: 12-TERM
AVERAGING: 1 PT
IF BNDWDTH: 1 KHz

PARAMETER: -CH1-
NORMALIZATION: -S11-
REFERENCE PLANE: 0.0000 mm
SMOOTHING: 0.0 PERCENT
DELAY APERTURE: -

S11 FORWARD REFLECTION

LOG MAGNITUDE ▶REF=0.000 dB 5.000 dB/DIV



CH 1 - S11
REFERENCE PLANE
0.0000 mm

▶MARKER 3
60.000000 GHz
-24.464 dB

MARKER TO MAX
MARKER TO MIN

- 1 56.000000 GHz
-8.417 dB
- 2 58.000000 GHz
-10.449 dB
- 4 62.000000 GHz
-15.152 dB
- 5 64.000000 GHz
-11.760 dB

MARKER READOUT
FUNCTIONS

*Description

1) Coax (V-term.) port R/L

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MODEL: NRP 60TS201
 DEVICE ID: WV020821-02

DATE: 08/31/2002 18:38
 OPERATOR: hmg doug chei

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START: 55.000000 GHz
 STOP: 65.000000 GHz
 STEP: 0.025000 GHz

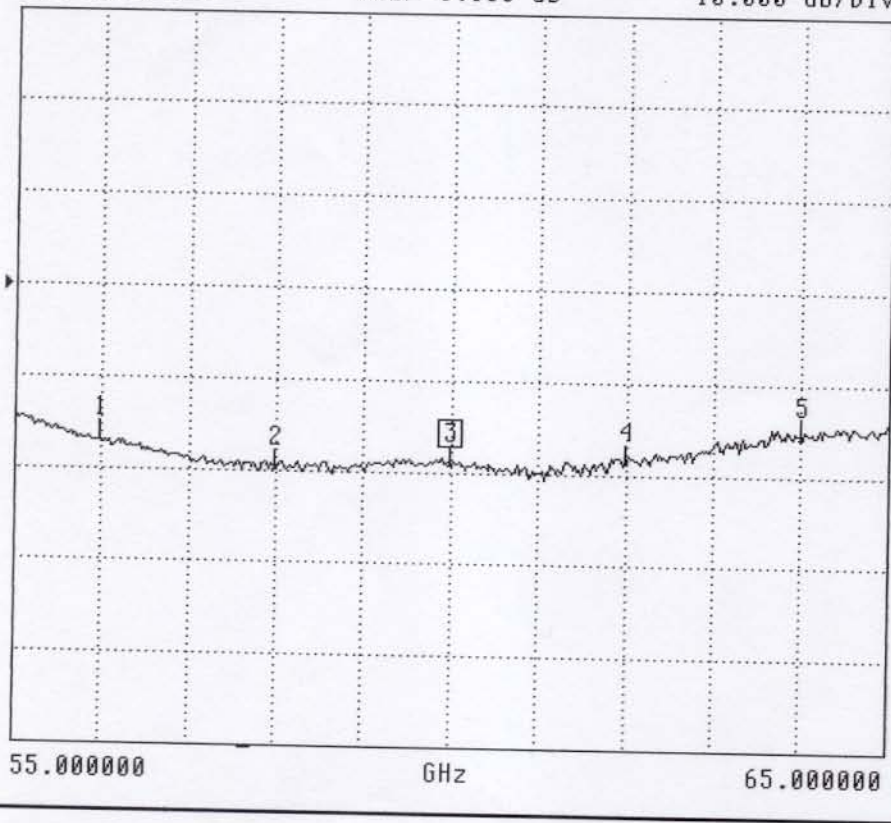
GATE START: -
 GATE STOP: -
 GATE: -
 WINDOW: -

ERROR CORR: 12-TERM
 AVERAGING: 1 PT
 IF BNDWIDTH: 1 KHz

PARAMETER: -----CH4-----
 NORMALIZATION: -S22-
 REFERENCE PLANE: OFF
 SMOOTHING: 0.0000 mm
 DELAY APERTURE: 0.0 PERCENT

S22 REVERSE REFLECTION

LOG MAGNITUDE ▶ REF=0.000 dB 10.000 dB/DIV



CH 4 - S22
 REFERENCE PLANE
 0.0000 mm

▶ MARKER 3
 60.000000 GHz
 -19.409 dB

MARKER TO MAX
 MARKER TO MIN

- 1 56.000000 GHz
-17.030 dB
- 2 58.000000 GHz
-20.051 dB
- 4 62.000000 GHz
-18.928 dB
- 5 64.000000 GHz
-15.887 dB

MARKER READOUT
 FUNCTIONS

*Description

1) waveguide port R/L