

## 60GHz TRANSMITTER

Model Name : **NRD60TX001**

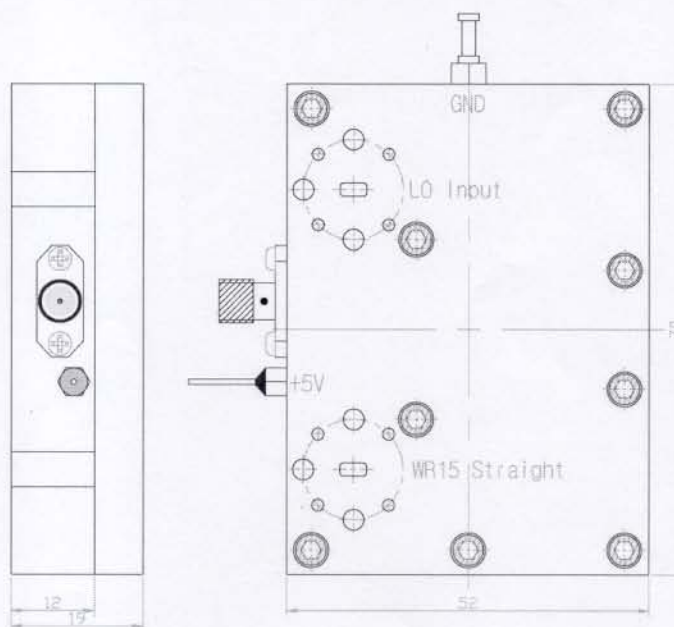
DATE: SEP/06/2002

Serial Number : **TA020906-02**

### Specifications

Parameters	Specifications
RF Frequency Range	58GHz ~ 62GHz
Loss(ASK)	12dB
Loss(straight)	0.7dB
LO Input VSWR	1.5:1
Signal Input VSWR	1.6:1
RF Port	WR-15
Signal Input Port	SMA(f)
Bias	+5V/30mA
Size(LxWxH)[mm]	70x52x20

### Dimensions



### Descriptions

1. DC Bias should be connected ground(GND) first, and then +5V next.
2. SMA female port is matched at 50Ω impedance.
3. RF port is compatible with WR-15 standard V-band rectangular waveguide.
4. All Dimensions are in millimeters.

37397A

MODEL: *NRD 60 TX 001*  
DEVICE ID: *TA020906-02*

DATE: 09/09/2002 15:38  
OPERATOR: *ORRYU*

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START: 0.040000 GHz  
STOP: 3.003100 GHz  
STEP: 0.006225 GHz

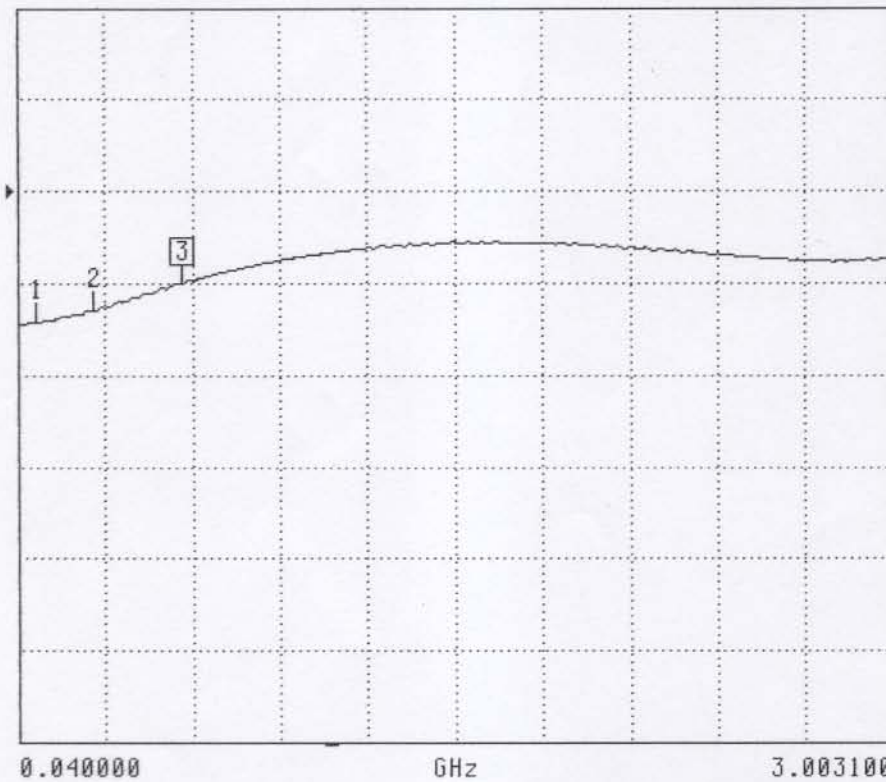
GATE START: -  
GATE STOP: -  
GATE: -  
WINDOW: -

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

PARAMETER: *Signal Input VSWR*      -CH1-  
NORMALIZATION:                      -S11-  
REFERENCE PLANE:                    0.0000 mm  
SMOOTHING:                            0.0 PERCENT  
DELAY APERTURE:                      -

### S11 FORWARD REFLECTION

LOG MAGNITUDE      ▶ REF=0.000 dB      10.000 dB/DIV



CH 1 - S11  
REFERENCE PLANE  
0.0000 mm

▶ MARKER 3  
0.600250 GHz  
-10.092 dB

MARKER TO MAX  
MARKER TO MIN

1 0.102250 GHz  
-14.220 dB  
2 0.301450 GHz  
-12.976 dB

MARKER READOUT  
FUNCTIONS

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MODEL: *NRD 60 & 001*  
 DEVICE ID: *TA020906-02*

DATE: 09/09/2002 15:18  
 OPERATOR: *ys Kim*

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START: 58.000000 GHz  
 STOP: 62.000000 GHz  
 STEP: 0.006250 GHz

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

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

PARAMETER: *WR-it straight*  
 NORMALIZATION:  
 REFERENCE PLANE:  
 SMOOTHING:  
 DELAY APERTURE:

-----CH1-----  
 -S11-  
 OFF  
 0.0000 mm  
 0.0 PERCENT

-----CH3-----  
 -S21-  
 OFF  
 0.0000 mm  
 0.0 PERCENT

CH1: S11 FWD REFL  
 LOG MAGNITUDE  
 REF=0.000 dB  
 10.000 dB/DIV

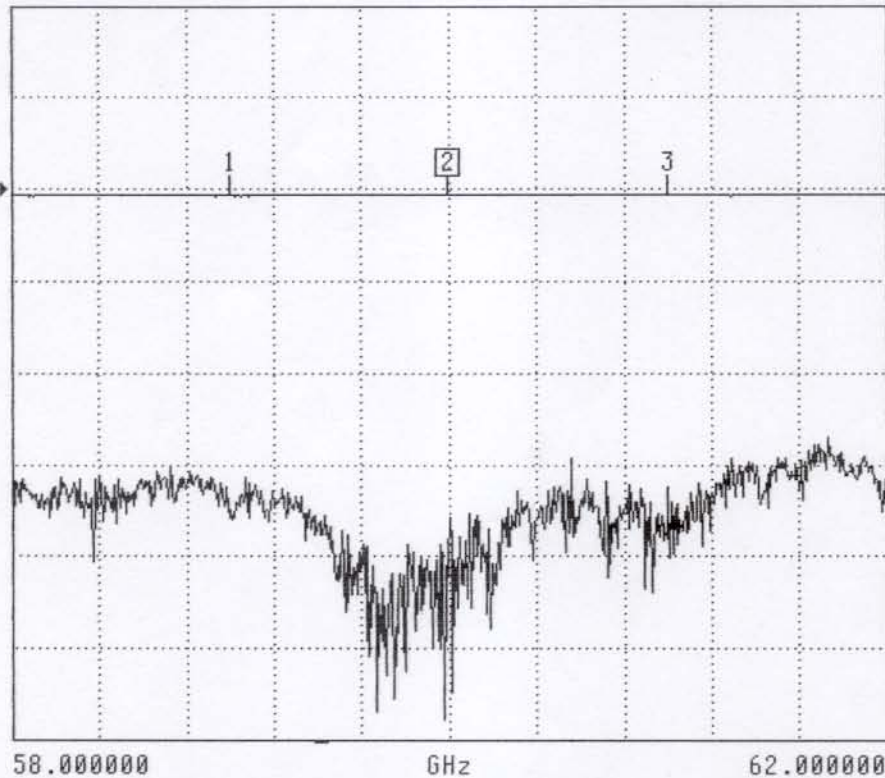
CH3: S21 FWD TRANS  
 LOG MAGNITUDE  
 REF=0.000 dB  
 10.000 dB/DIV

CH 3 - S21  
 REFERENCE PLANE  
 0.0000 mm

MARKER 2  
 60.000000 GHz  
 -0.657 dB

MARKER TO MAX  
 MARKER TO MIN

1 59.000000 GHz  
 -0.686 dB  
 3 61.000000 GHz  
 -0.706 dB



MARKER READOUT  
 FUNCTIONS

37397A

MODEL: *NRD 60 & 001*  
DEVICE ID: *TA020906-02*

DATE: 09/09/2002 15:21  
OPERATOR: *JS Kim*

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START: 58.000000 GHz  
STOP: 62.000000 GHz  
STEP: 0.006250 GHz

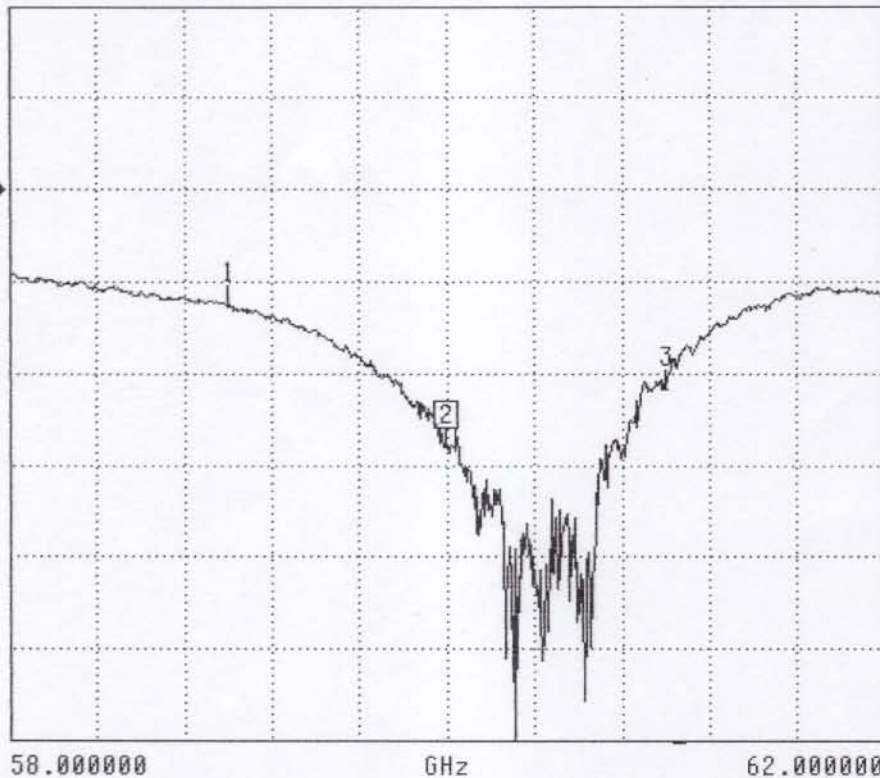
GATE START: -  
GATE STOP: -  
GATE: -  
WINDOW: -

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

PARAMETER: *LO Input*  
NORMALIZATION: -S11-  
REFERENCE PLANE: 0.0000 mm  
SMOOTHING: 0.0 PERCENT  
DELAY APERTURE: -

### S11 FORWARD REFLECTION

LOG MAGNITUDE      REF=0.000 dB      10.000 dB/DIV



CH 1 - S11  
REFERENCE PLANE  
0.0000 mm

▶ MARKER 2  
60.000000 GHz  
-28.059 dB

MARKER TO MAX  
MARKER TO MIN

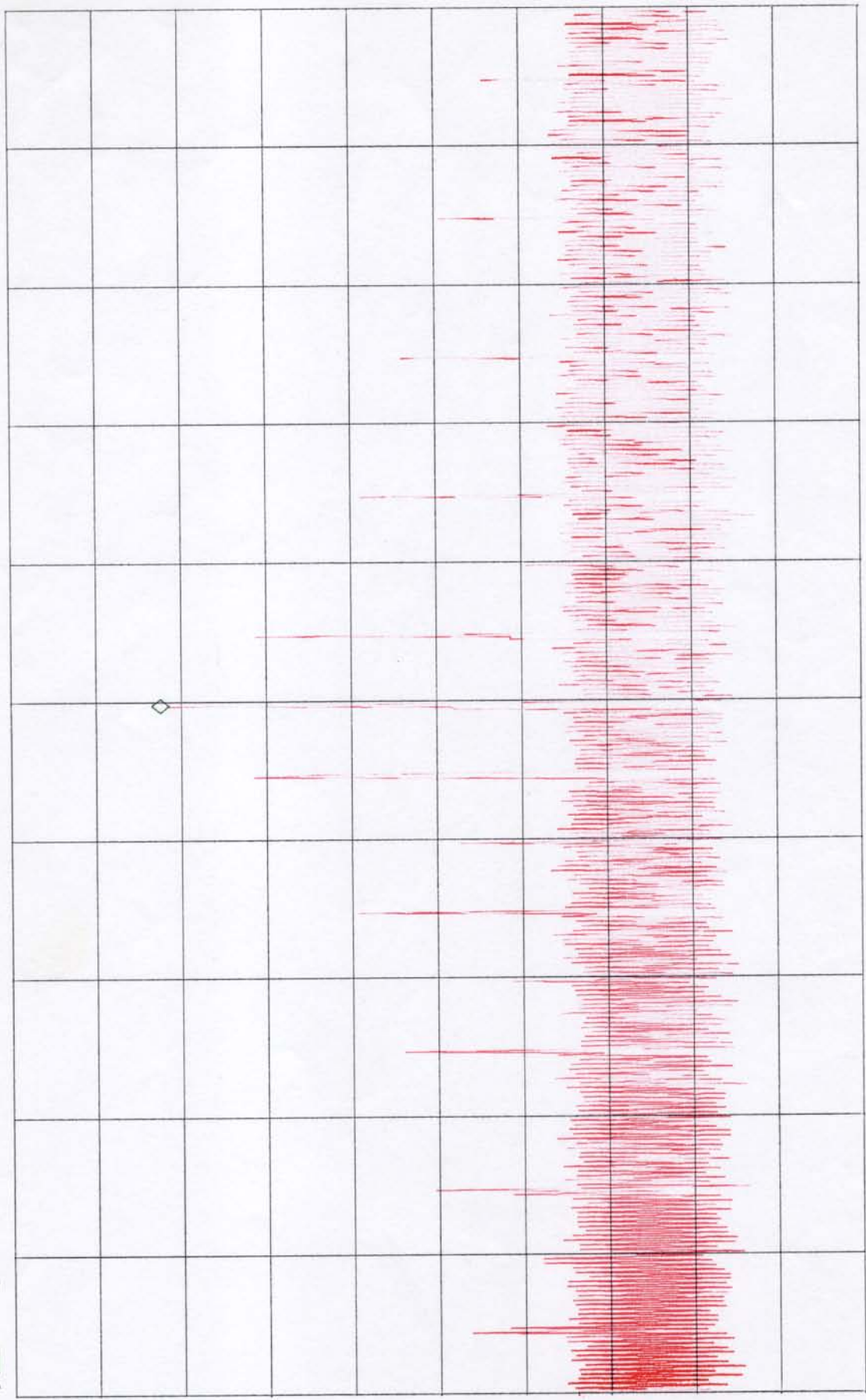
1 59.000000 GHz  
-12.569 dB  
3 61.000000 GHz  
-21.683 dB

MARKER READOUT  
FUNCTIONS

CL 47.2dB  
RL 17.2dBm  
MKR -1.52dBm  
60.007GHZ

10dB/

SPAN 2.000GHZ  
SWP 50.0ms



CENTER 60.007GHZ  
RBW 1.0MHZ  
VBW 1.0MHZ

Model: NRD 607X001

\* 100MHz Act Modulation Ext