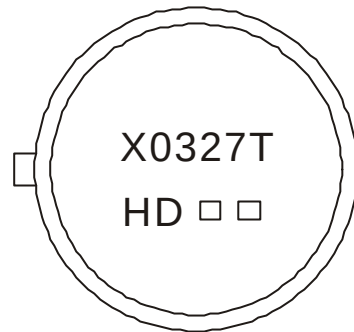
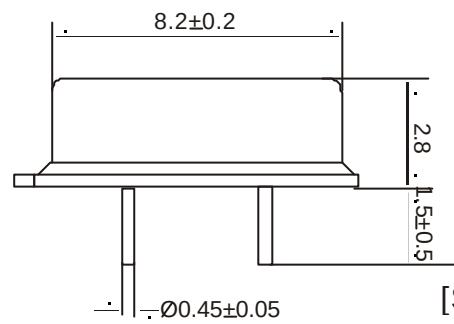


1.OUTLINE DRAWING AND DIMENSION

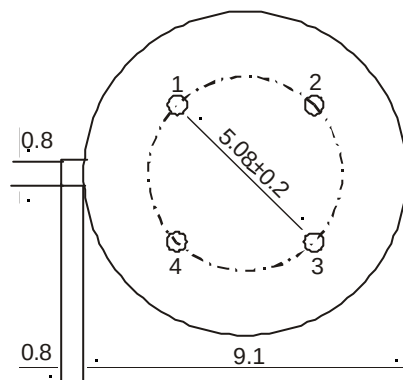


[Unit:mm]

[Top view]

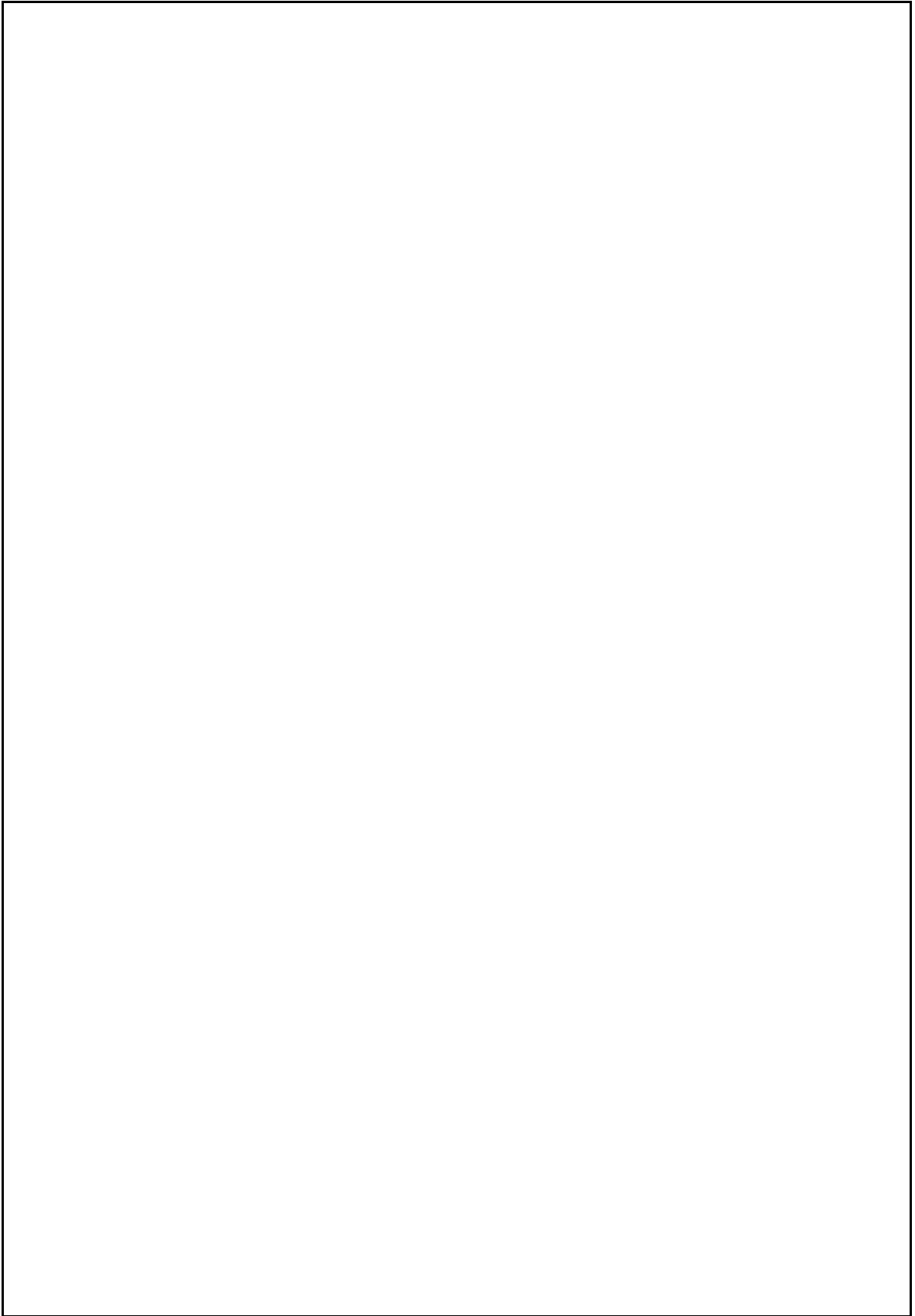


[Side view]



[Bottom view]

PIN Number	FUNCTION
1	Tx(903.75MHz)
2	ANT
3	RX(926.25MHz)
4	GROUND



2. MARKING

X0327T
HD □ □

- ① Logo: HD
- ② Model No.: X0327T

3. PERFORMANCE

3-1. APPLICATION

SAW Duplexer for Cordless Telephone
Center Frequency Rx(f_R): 926.25MHz
Center Frequency Tx(f_T): 903.75MHz

3-2. MAXIMUM RATING

CHARACTERISTICS	RATING	UNITS
DC Permissive Voltage	0	V
Maximum Input Power	5	dBm
Operating Temperature Range	-10 ~ +60	$^{\circ}\text{C}$
Storage Temperature Range	-40 ~ +85	$^{\circ}\text{C}$

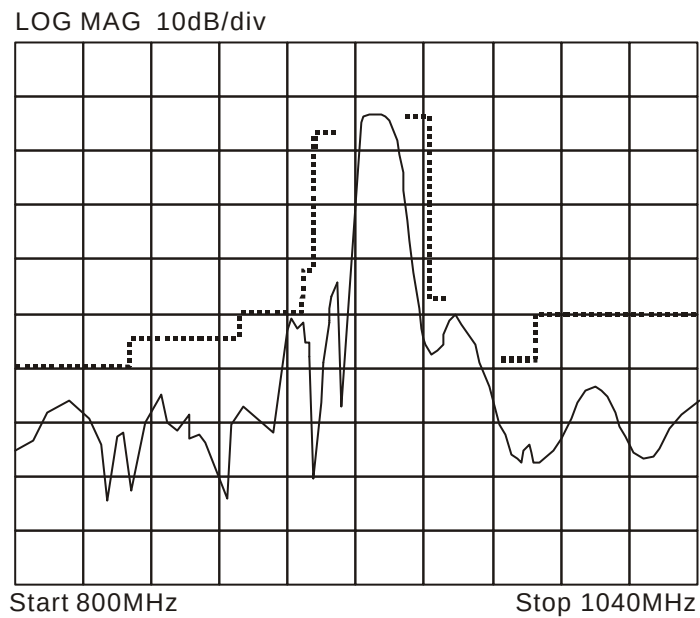
3 -3. ELECTRICAL CHARACTERISTICS

3-3-1. TABLE

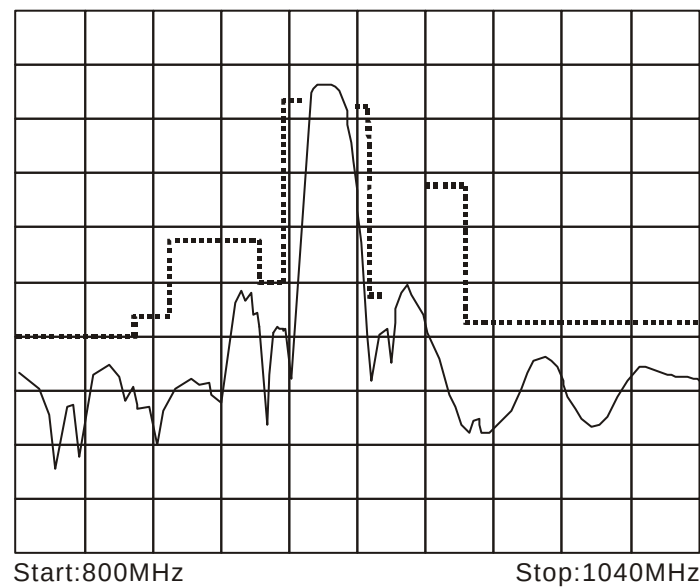
CHARACTERISTICS	Frequency	Specification
Center Frequency Rx (f_R)	926.25MHz	
Center Frequency Rx (f_T)	903.75MHz	
Passband Width at 3db		$f_R \pm 1.0\text{MHz}$ Min. $f_T \pm 1.0\text{MHz}$ Min.
Insertion Loss	$f_R - 1.0\text{MHz} \sim f_R + 1.0\text{MHz}$ $f_T - 1.0\text{MHz} \sim f_T + 1.0\text{MHz}$	4.0dB Max. 4.0dB Max
Passband Ripple	$f_R - 1.0\text{MHz} \sim f_R + 1.0\text{MHz}$ $f_T - 1.0\text{MHz} \sim f_T + 1.0\text{MHz}$	1.5dB Max. 1.5dB Max.
StopBand Attenuation Rx(f_R)	450.00MHz ~ 840.00MHz 840.00MHz ~ 882.00MHz 882.00MHz ~ 903.50MHz 903.50MHz ~ 906.20MHz 906.20MHz ~ 916.90MHz 935.00MHz ~ 946.00MHz 946.00MHz ~ 949.00MHz 972.00MHz ~ 985.00MHz 985.00MHz ~ 1350.00MHz 1350.00MHz~1800.00MHz	45 dB Min 40 dB Min 20 dB Min 30 dB Min 8 dB Min 5 dB Min 35 dB Min 42 dB Min 38 dB Min 25 dB Min
Stop Band Attenuation Tx	450.00MHz ~ 840.00MHz 840.00MHz ~ 855.00MHz 855.00MHz ~ 884.00MHz 884.00MHz ~ 889.50MHz 889.50MHz ~ 894.40MHz 917.50MHz ~ 923.80MHz 923.80MHz ~ 927.60MHz 945.20MHz ~ 960.00MHz 960.00MHz ~ 1050.00MHz 1050.00MHz~1350.00MHz 1350.00MHz~1800.00MHz	45 dB Min 42 dB Min 30 dB Min 35 dB Min 5 dB Min 8 dB Min 43 dB Min 20 dB Min 42 dB Min 38 dB Min 21 dB Min
Isolation between Rx and Tx	$f_R - 1.0\text{MHz} \sim f_R + 1.0\text{MHz}$ $f_T - 1.0\text{MHz} \sim f_T + 1.0\text{MHz}$	35 dB Min 35 dB Min
Terminating Impedance (Z_0)		50 Ω

3-3-2. GRAPH

1. Frequency response(ANT→RX)

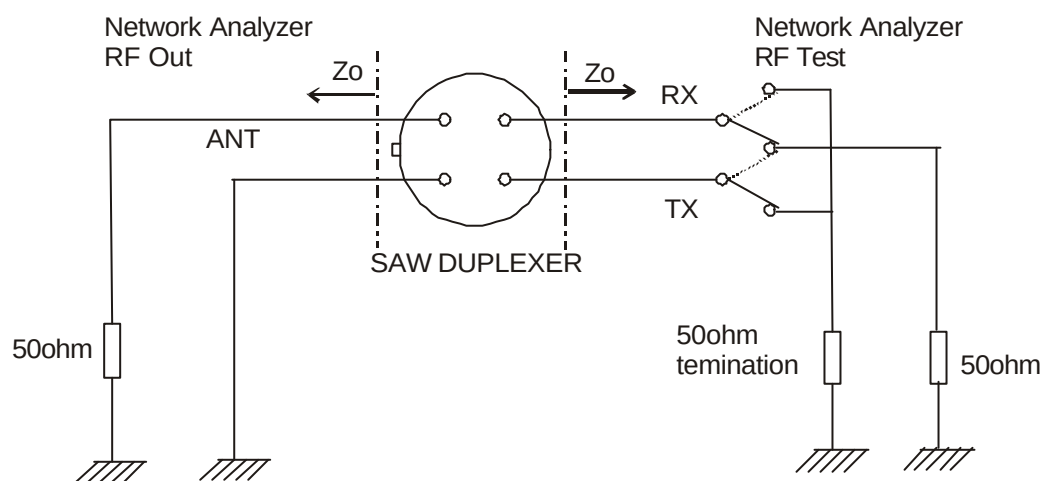
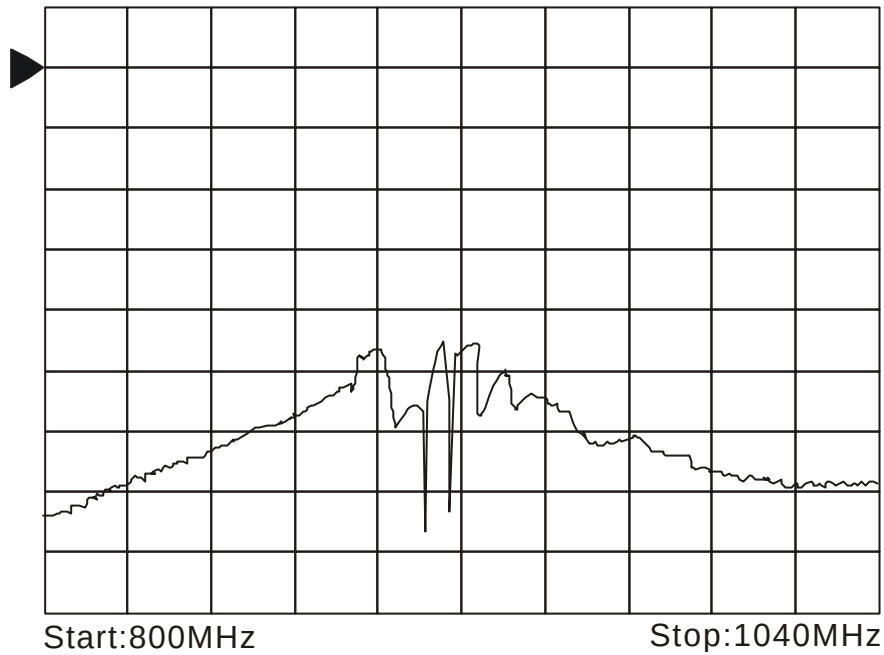


2. Frequency response (TX→ANT)



③ Frequency response (Tx→Rx)

LOG MAG 10dB/div



4. RELIABILITY

4-1. LIFE TEST

ITEM	TEST CONDITION	LIMIT
High Temperature Exposure Low Temperature Exposure Moisture Resistance	Ta = + 85 $\pm$ 2 ⁰ C,100H Ta = -30 $\pm$ 2 ⁰ C,100H Ta = + 40 $\pm$ 2 ⁰ C, RH 95%,120H	After the test, specimen would be kept at room temperature for 2 hours. Specimen shall meet the electrical specification.

4-2. HEAT CYCLE, SOLDERING TEST

ITEM	TEST CONDITION	LIMIT
Temperature Cycle	-20 ⁰ C,30min $\longleftrightarrow$ +110 ⁰ C,30min 10 cycle	Same as 4-1
Solder ability	Immerse in soldering bath at 230 $\pm$ 5 ⁰ C,5 $\pm$ 1sec.	More than 3/4 area If the soldering pad must be covered with new solder.
Resistance to Soldering Heat (Reflow)	Preheat:180 ⁰ C, 2min. Reflow:240 ⁰ C,10sec.	Same as 4-1

4-3. MECHANICAL TEST

ITEM	TEST CONDITION	LIMIT
Vibration	Amplitude=1.5mm,10 $\longleftrightarrow$ 55Hz,sweep time=1min,3direction each 2H Peak	Same as 4 - 1
Shock	acceleration=1500G,duration=0.5msec,wave form=half-sin, 6 direction each 3 shocks.	

5. CAUTION

- 5-1. This is an electrostatic sensitive device. Please avoid static voltage during operation and storage.
- 5-2. Sudden change of temperature shall be avoided ,deterioration If the characteristics can occur.
- 5-3. Ultrasonic vibration may cause deterioration and destruction of the components Please avoid ultrasonic cleaning.

6. REVISION

Date	Page	Revision	Reason