





**Product Specification**

**Model :  
SPK-TFM-1010**

**FM Module**

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1. SCOPE

This specification applies to FM Module

2. DIMENSIONS

Specified by attached product outline specification

L = 11.2 mm typ.

W= 11.2 mm typ.

Height = 2.2 mm Max.

3. General Specifications

No.	Item	Spec
1	Frequency Range	76 ~ 108 MHz
2	Operating Temperature	-20 ~ +70
3	ANT Input Impedance	50Ω Unbalanced

4. Test Modulation

No.	Item	Mono	Stereo
1	Modulation Frquency	1KHz, 22.5KHz/dev	1KHz, 22.5KHz/dev PILOT=10% fpil=19KHz
2	RF Input level	60dBμV	
3	TEST frequency	98MHz	

5. DC Specification

Item	Test Condition	Specification			
		MIN	TYP	MAX	UNIT
Supply Voltage(Vcc)	Off station	2.5	3.0	3.6	V
Consumption Current	-	10.0	14.0	16.0	mA



6. Electrical Specification

No.	Item	Test Condition	Specification			
			MIN	TYP	MAX	UNIT
1	Usable Sensitivity (S/N 30dB)	76.0 MHz	-	8	15	dB $\mu$ V
		98.0 MHz	-	8	15	dB $\mu$ V
		106.0 MHz	-	8	15	dB $\mu$ V
2	S/N Ratio	with B.P.F 300Hz to 15KHz	54	60	-	dB
3	Distortion	with B.P.F 300Hz to 15KHz	-	0.2		%
4	Audio Output Voltage	1KHz, 22.5KHz/dev			115	mVr
5	3dB Limiting	90.0 MHz	-	12	20	dB
6	IF Rejection	90.0 MHz	60	70	-	dB
7	Image Rejection	90.0 MHz	24	28	-	dB
8	Stereo Separation		30		-	dB

7. PIN DEFINITION

Terminal No.	Name	Description
1	ANT	RF input
2	N.C.	
3	Left Out	Left chanel audio output
4	Right Out	Right chanel audio output
5	GND	
6	Vcc	
7	Write/Read	write/ read control input for the 3Wire Bus
8	Busmode	Bus mode select input
9	Clock	Bus clock line input
10	Data	Bus data line input / output



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FM Module

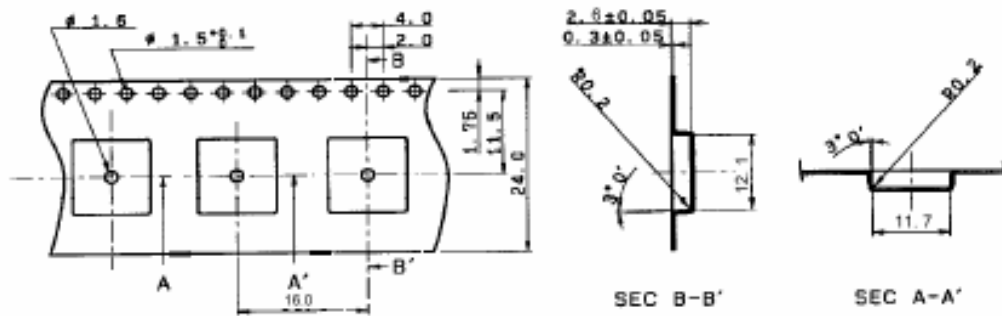
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### 8. PACKAGEING

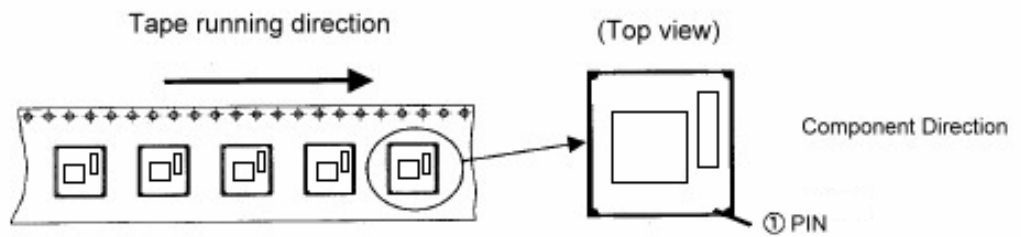
#### 8-1 Embossed tape

Dimension of the tape (meet to EIA-418-2-A requirements)

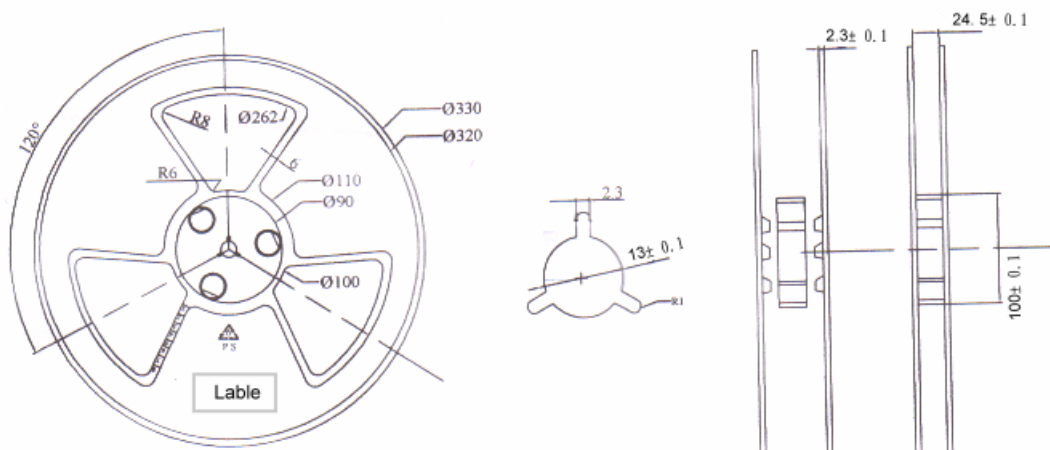
Unit : mm



#### 8-2 Component Direction



#### 8-3 Reel Dimension (Unit : mm)

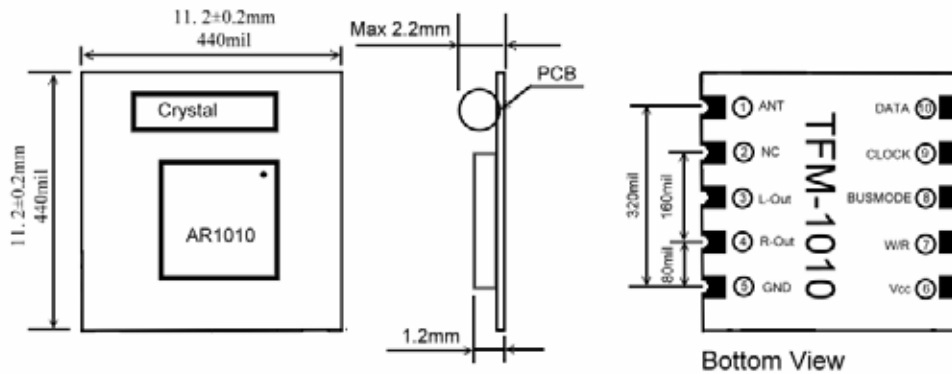


- (1) Quantity per reel : 1000pcs
- (2) Material : Black Anti-Static Polystyrene



9. OUTLINE DIMENSION

9-1. Outline Package



Top View

Bottom View

No.	Terminal name	No.	Terminal name
1	ANT	6	Vcc
2	N.C.	7	W/R
3	L-Out	8	BUSMODE
4	R-Out	9	Clock
5	GND	10	Data

PS:

R/W (PIN 7) : NC, If I<sup>2</sup>C control method

BUSMODE(PIN 8): GND, If I<sup>2</sup>C control method

Vcc, If 3Wire control method

9-2. Pads Drawing of Main PCB

