

SAW Resonator 1000 MHz

MODEL NO.: TC0528A

REV. NO.: 3.0

A. FEATURES:

1. 1-Port Resonator.

B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitive Level: Level 1 (MSL1)

RoHS Compliant
Lead free
Lead-free soldering

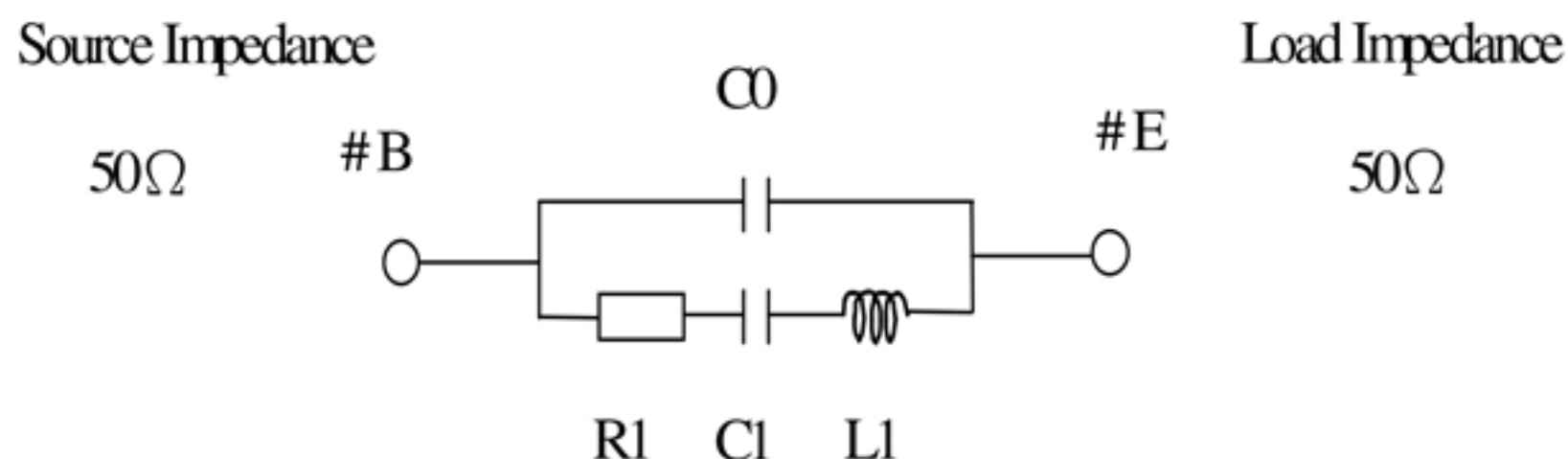
Electrostatic Sensitive Device

C. ELECTRICAL CHARACTERISTICS:

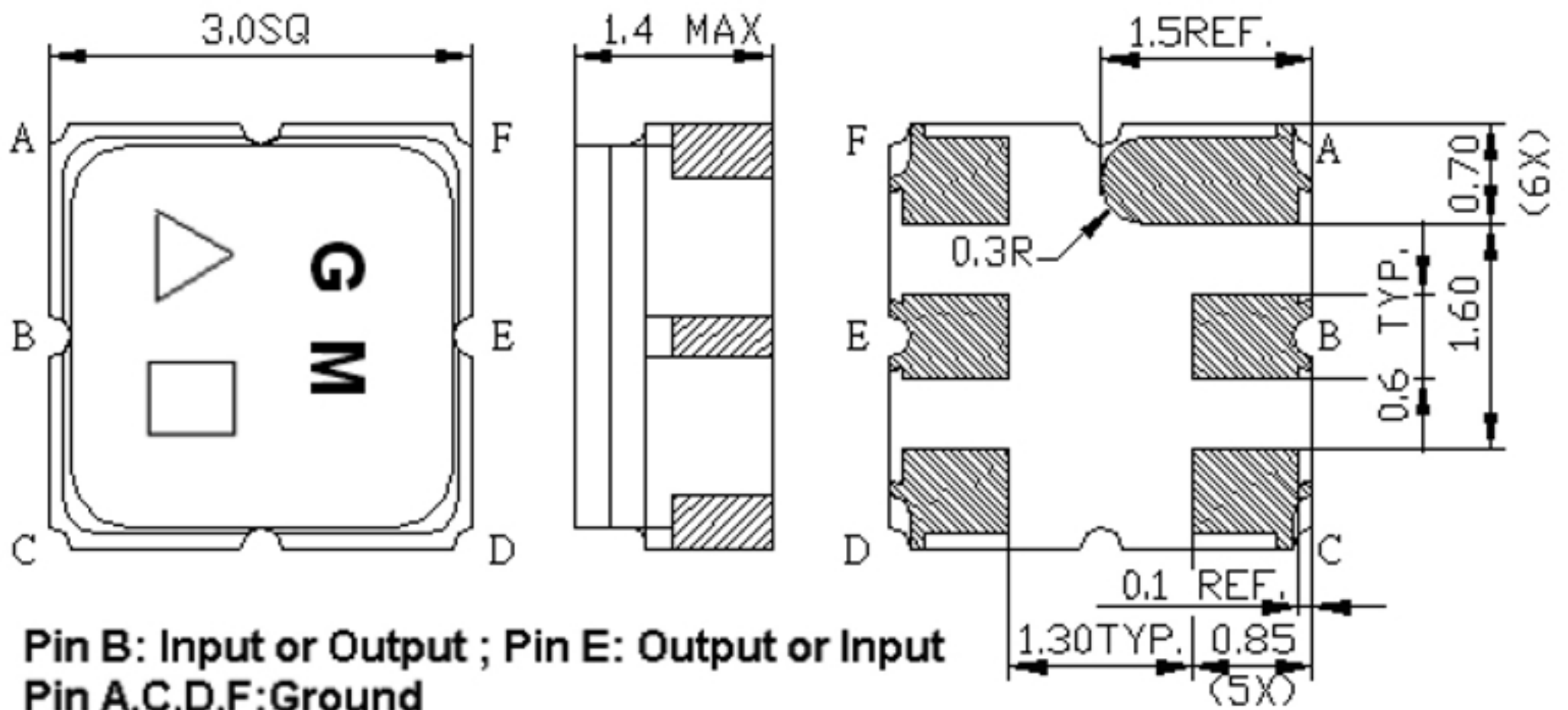
Characteristic	Units	Minimum	Typical	Maximum
Center frequency Fr	MHz	999.875	1000.000	1000.125
Insertion Loss IL	dB	-	1.30	2.0
Equivalent Elements				
Motional capacitance C1	fF	-	1.66	-
Motional inductance L1	μH	-	15.3	-
Motional resistance R1	Ohm	-	10.7	-
Parallel capacitance Co	pF	-	2.75	-
Temp.coeff.	ppm/c*2	-	0.032	-
Turnover To	deg.C	-	25	-
Package size		SMD 3.0X3.0X1.4mm		

D. EQUVIRENT CIRCUIT:

One-Port Resonator:



E. OUTLINE DRAWING:



Pin B: Input or Output ; Pin E: Output or Input

Pin A,C,D,F:Ground

△ : Year Code

□ : Date Code

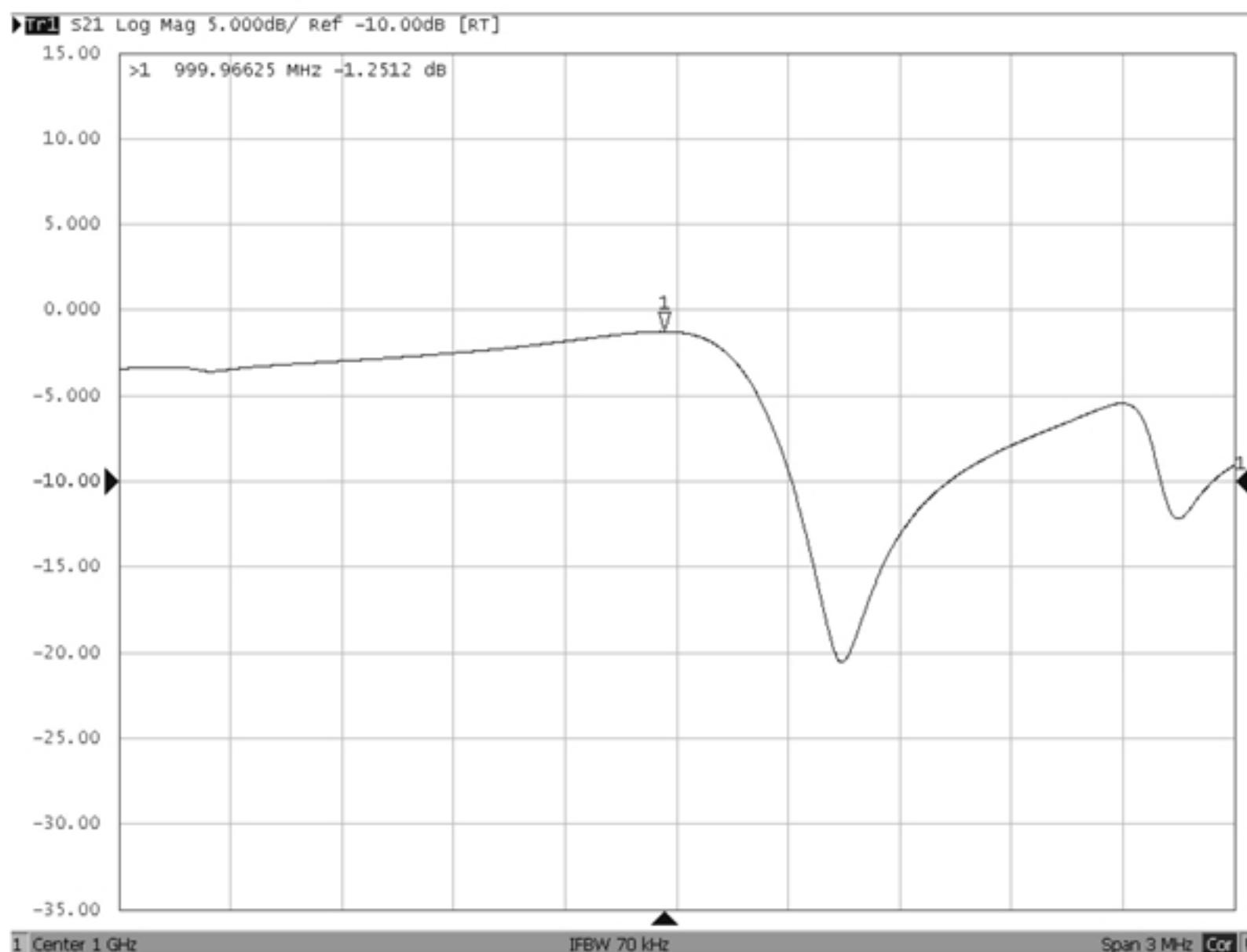
Unit : mm

Year code: 9 for 2009,0 for 2010,...

Date code: Provided by planer each year

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

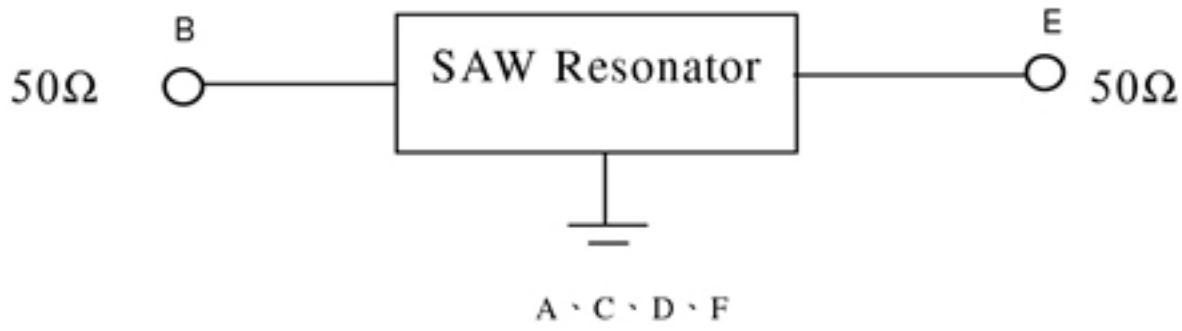
F. FREQUENCY CHARACTERISTICS



G. TEST CIRCUIT:

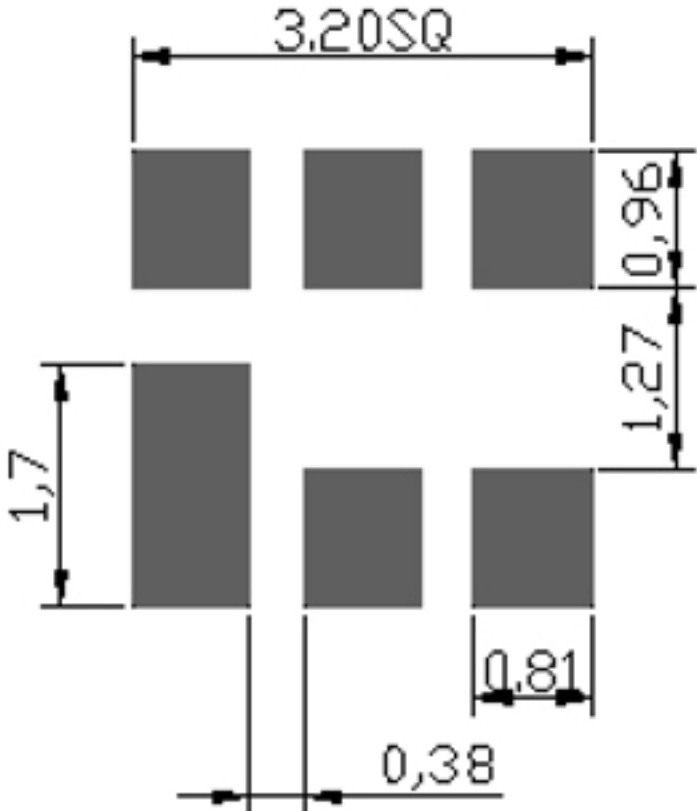
Network analyzer

From 50Ω
Network
Analyzer



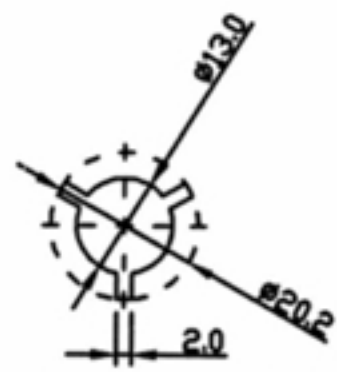
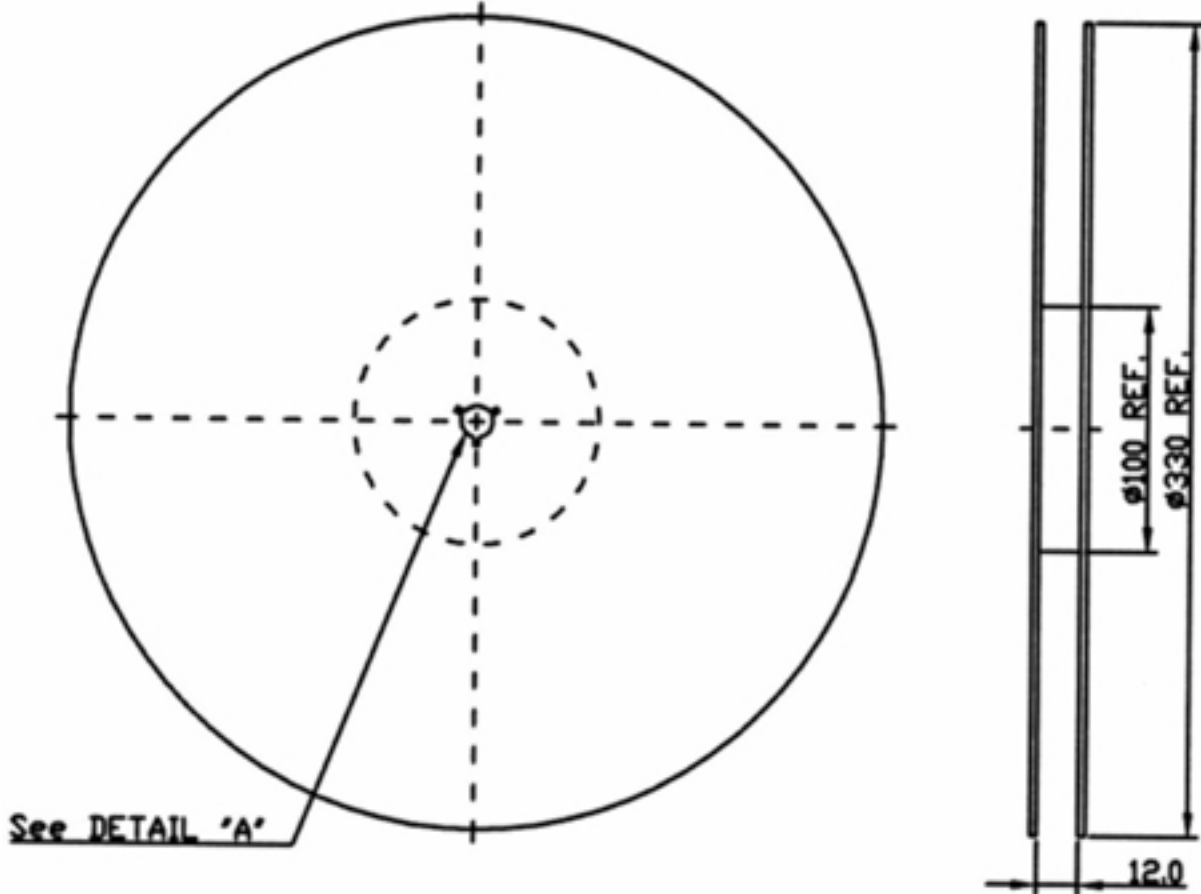
To 50Ω
Network
Analyzer

H. LAND PATTERN:

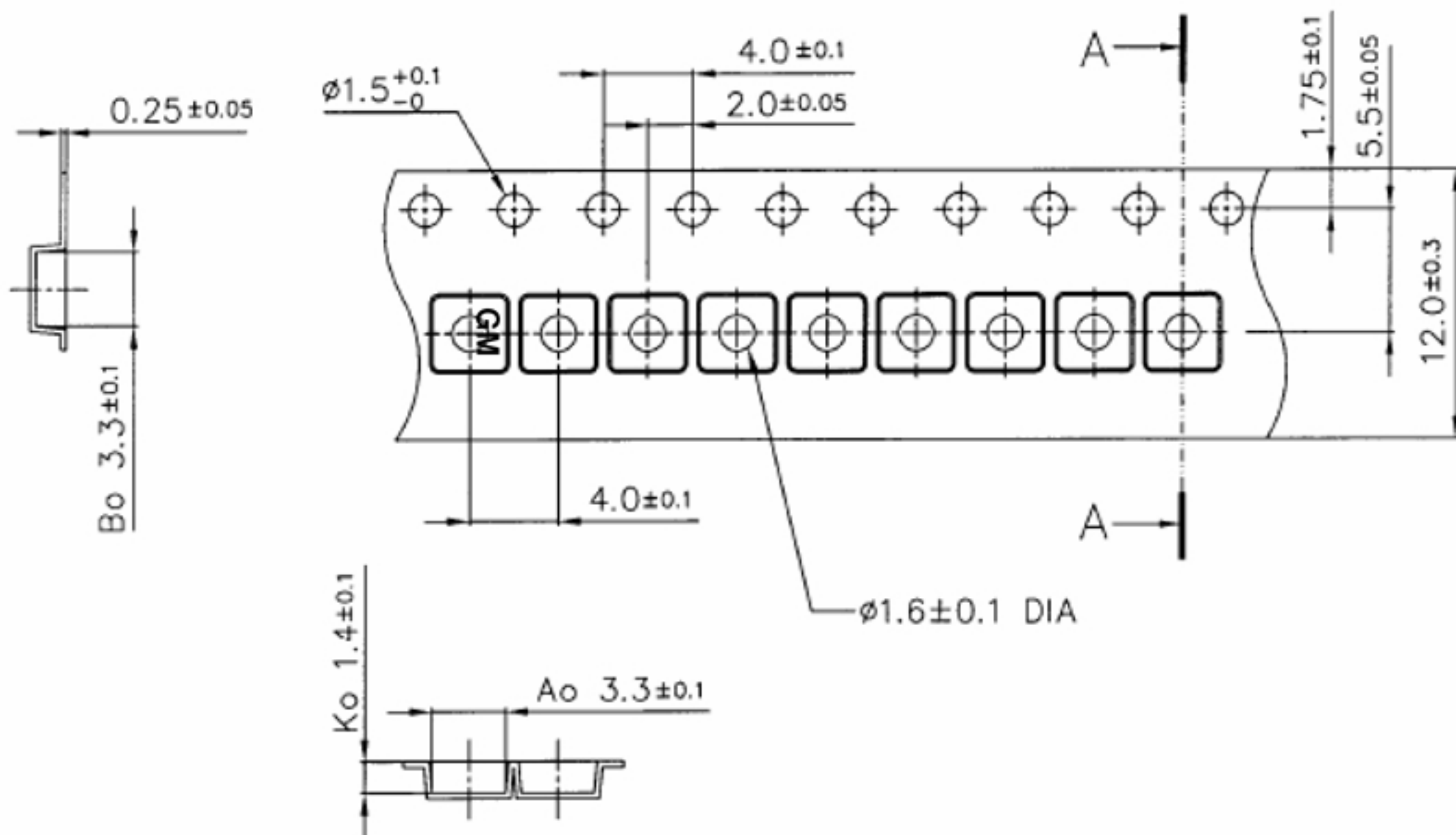


I. PACKING:

1. REEL DIMENSION(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



J. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at $150 \sim 180^\circ\text{C}$ for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at $245 \sim 260^\circ\text{C}$ peak (min. 10sec).
4. Time : 2 times.

