SAW Resonator 1090 MHz

MODEL NO.: TD0116A REV. NO.: 4

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

A. FEATURES:

1. 2-Port Resonator.

B. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC voltage: 12 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

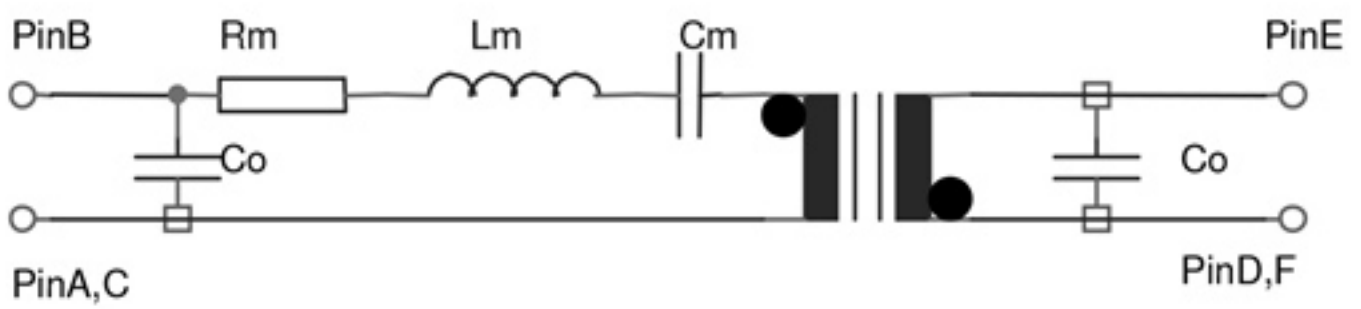
C. ELECTRICAL CHARACTERISTICS:

Reference Temperature T_A=25℃

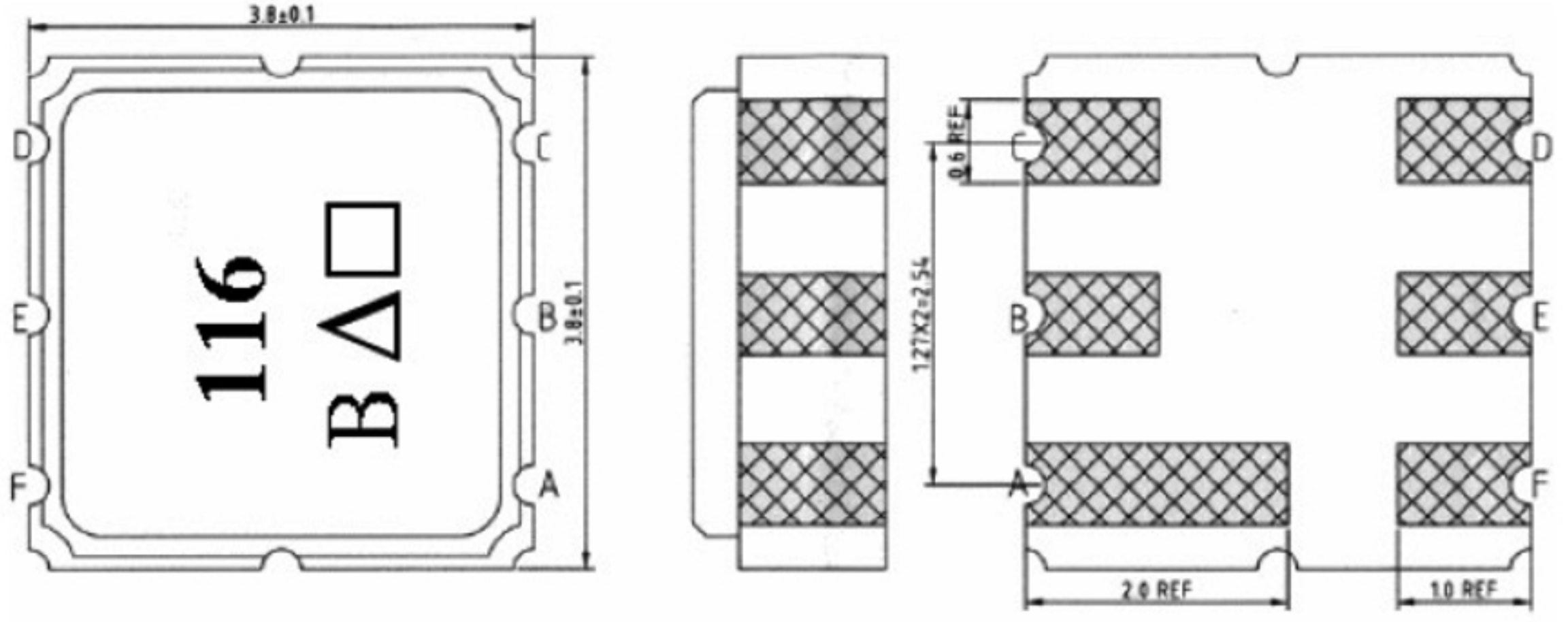
Characteristic	Units	Minimum	Typical	Maximum
Center frequency **Fr**	**MHz**	1089.800	1090	1090.200
Insertion Loss **IL**	**dB**	-	10	12.5
Unloaded Quality factor		-	4700	-
Ageing of Fc	**ppm**	-	-	10/year
Equivalent Elements				
Motional capacitance **C1**	**fF**	-	0.18	-
Motional inductance **L1**	**μH**	-	114	-
Motional resistance **R1**	**Ohm**	-	178	-
Parallel capacitance **Co**	**pF**	-	1.5	-
Temp.coeff.	**ppm/c*2**	-	0.032	-
Turnover To	**deg.C**	-	25	-
Package size		SMD 3.8X3.8X1.4mm		

D. EQUVIRENT CIRCUIT:

Two-Port Resonator:



E.OUTLINE DRAWING:



#E：Input or Output
#B：Output or Input
#A、C、D、F：Ground
△：Year Code
□：Data Code

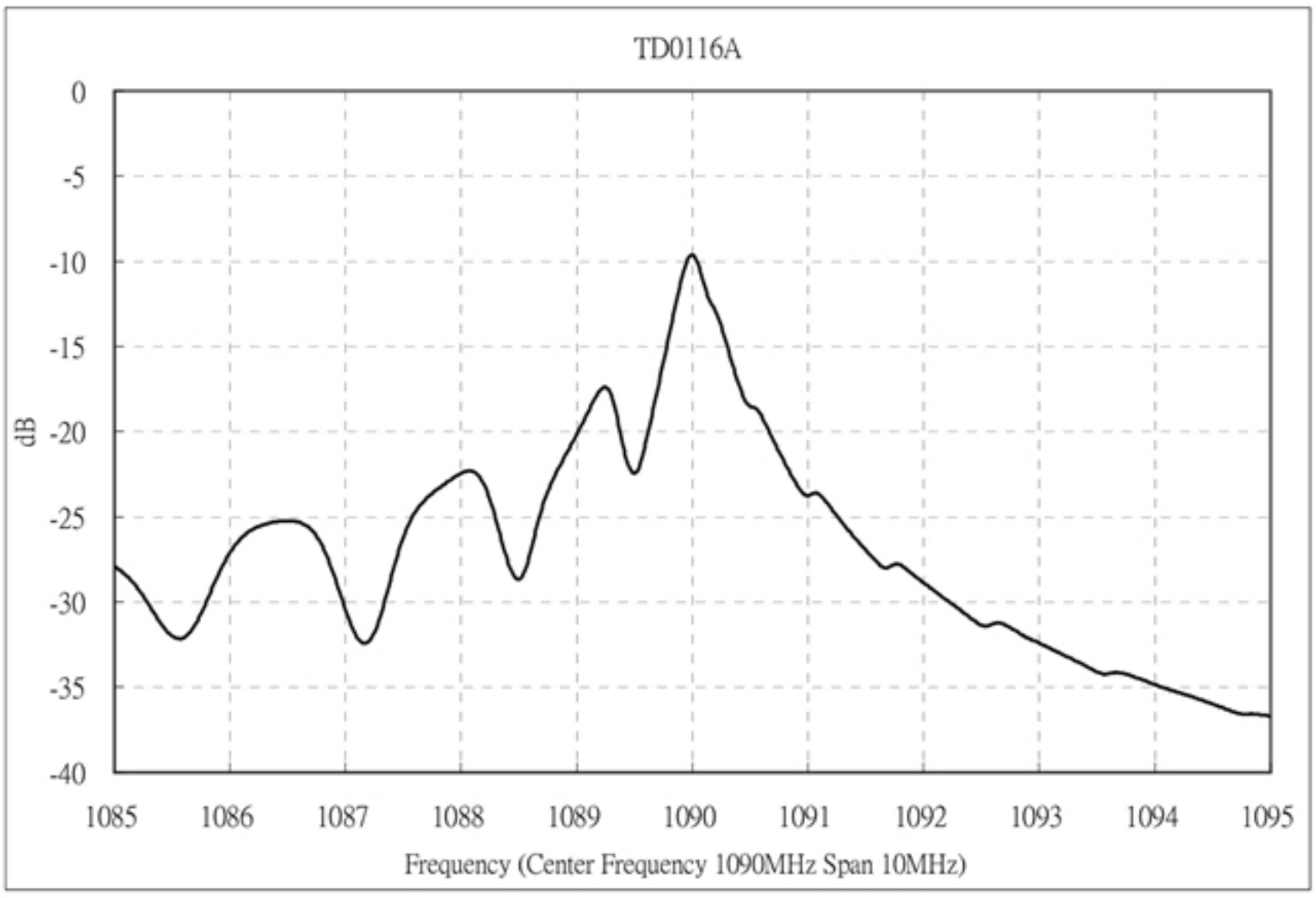
☐ Data code：See the table

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

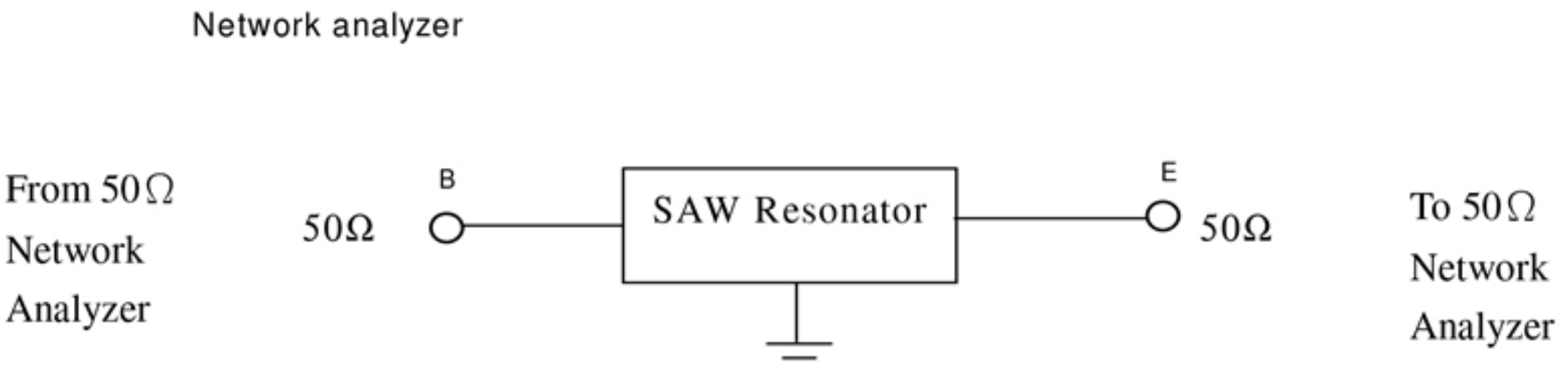
△ Year code：See the table

Year	2015 2013 2011	2016 2014 2012
Year Code	D	d

F.FREQUENCY CHARACTERISTICS:

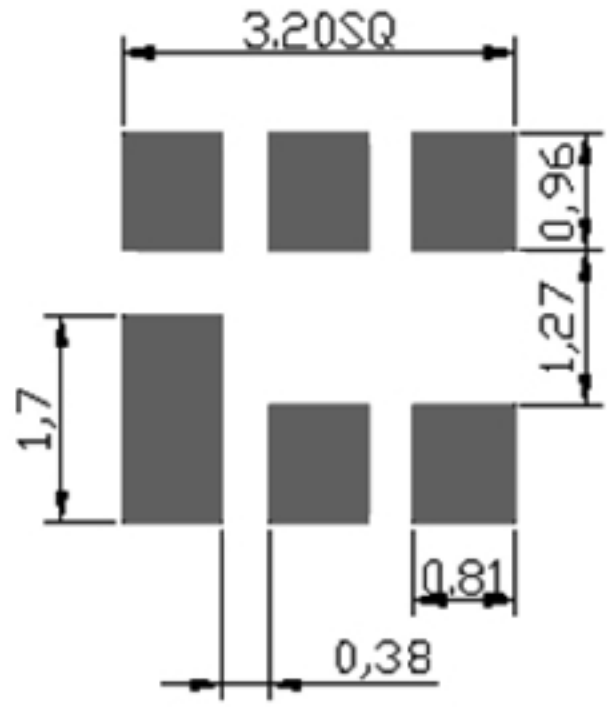


G. TEST CIRCUIT:



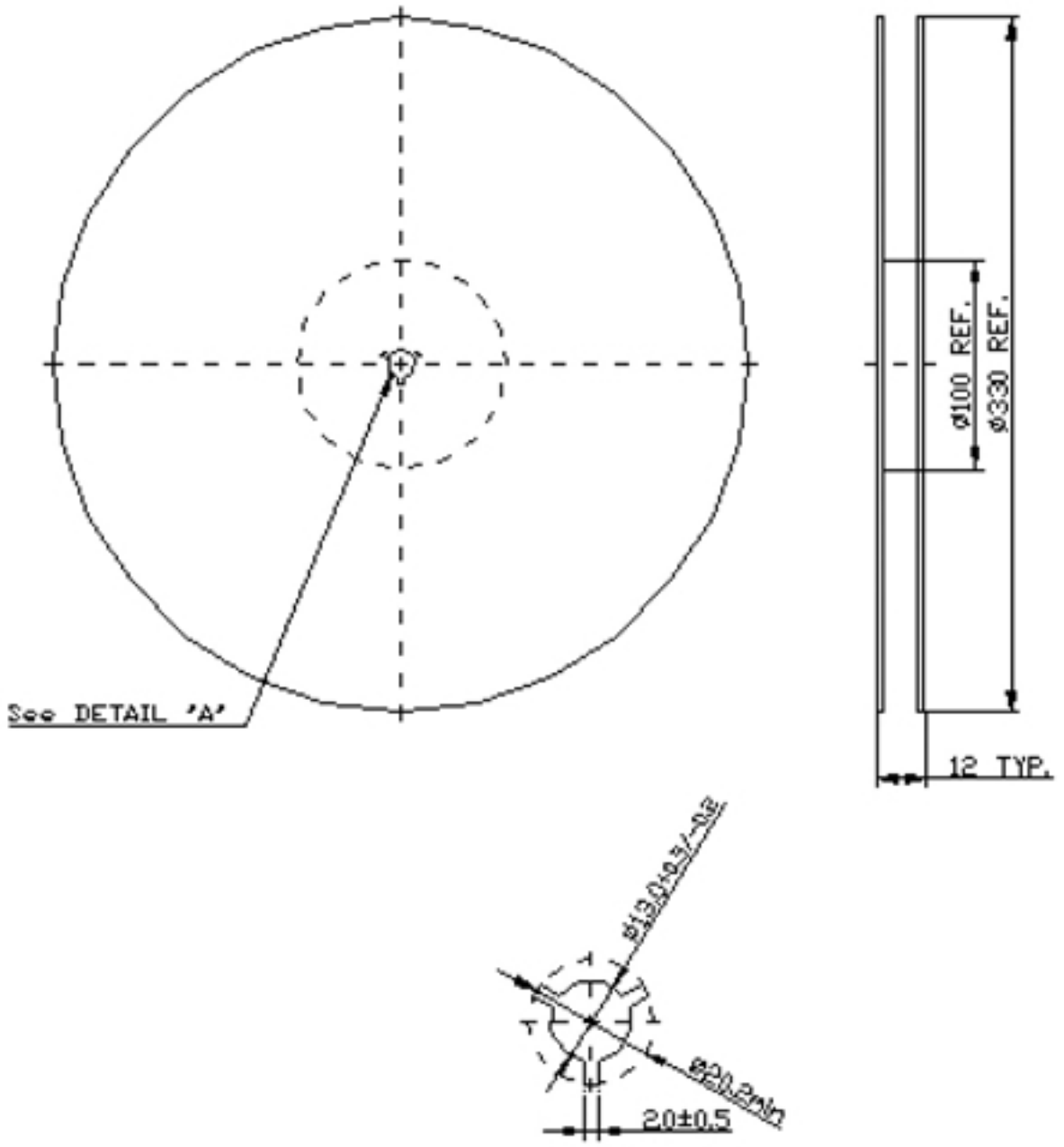
A、C、D、F

H.PCB FOOTPRINT

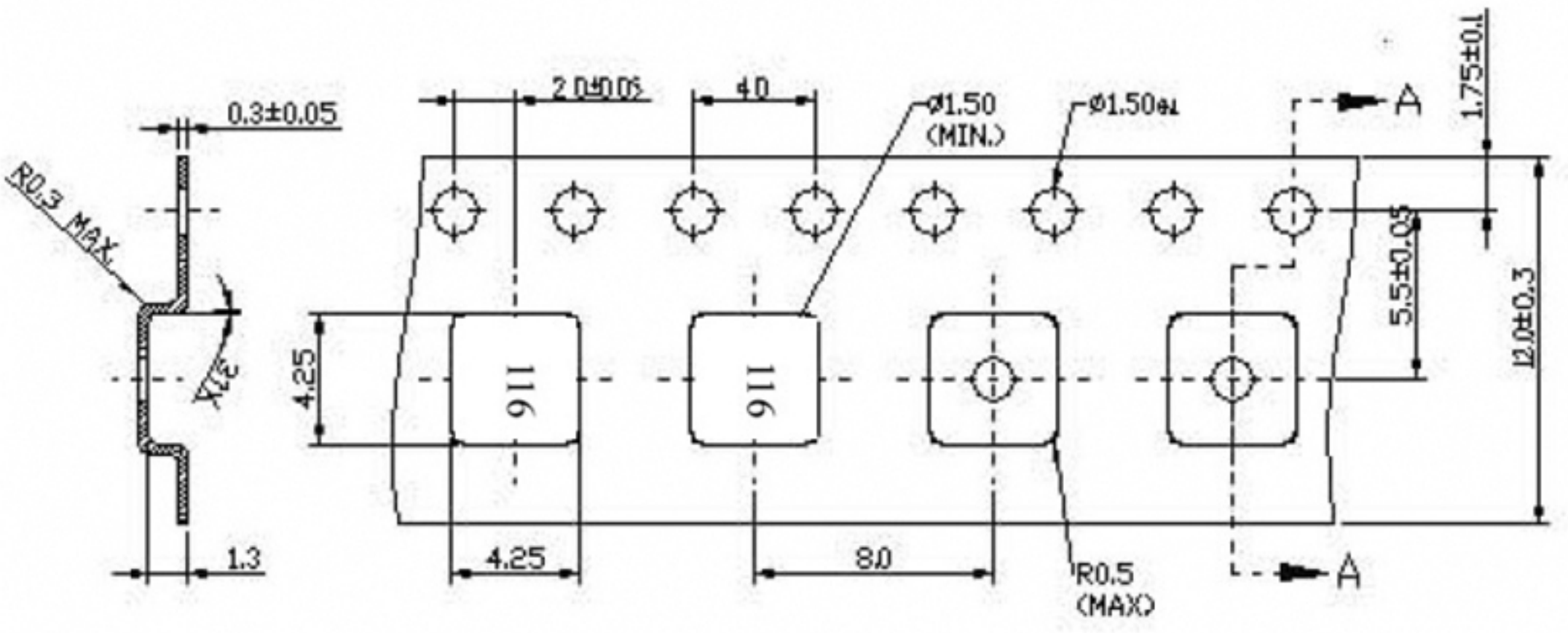


I. PACKING:

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



2.TAPE DIMENSION



Section A-A

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 245~260℃ peak (min. 10sec).
4. Time : 2 times.