

SAW Oscillator 628.1737MHz SMD 13.7X9.4 mm

MODEL NO.:TS0032A

REV. NO.:1.0

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

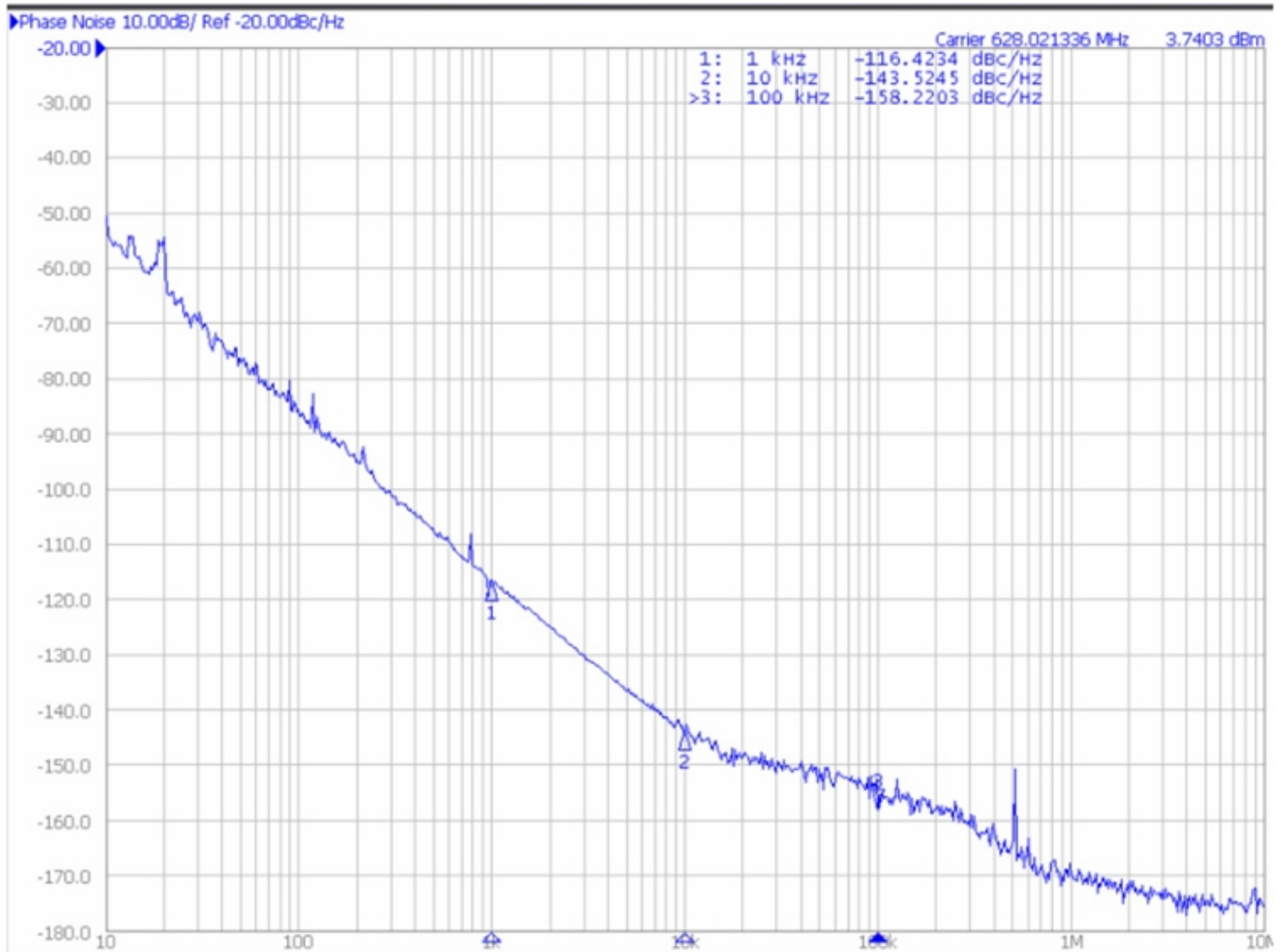
A. Electrical Specifications:

Parameter	Symbol	Limits			Units
		min.	typ.	max.	
Output Frequency	-	-	627.9933	-	MHz
Frequency tolerance	-	-250	-	250	ppm
Current Consumption	-	-	-	40	mA
Output(Disabled) Amplitude into 50Ω	-	-	-	75	mV p-p
Output DC Resistance (between Q and \bar{Q})	-	50	-	-	KΩ
Enable Input HIGH Voltage Input LOW Voltage Input HIGH Current Input LOW Current	V _{IH}	V _{CC} -0.1	V _{CC}	V _{CC} +0.1	V
	V _{IL}	0.0	-	0.2	V
	I _{IH}	-	3	5	mA
	I _{IL}	-	-	-1	mA
Q and \bar{Q} Output Voltage into 50Ω (VSWR ≤ 1.2) Harmonic Spurious Nonharmonic Spurious Symmetry	V _o	0.6	0.9	-	Vp-p
	-	-	-25	-20	dBc
	-	-	-	-60	dBc
	-	48	50	51	%
Q and \bar{Q} Period Jitter No noise on V _{CC} 200m Vp-p from 1MHz to 1/2 fo on V _{CC}	-	-	15	30	ps[p-p]
	-	-	-	35	ps[p-p]
Oscillation Start Up time	-	-	-	80	usec.
Supply Voltage	V _{CC}	3.1	3.3	3.5	V
Frequency Pulling At V _{CC} = 3.3V±0.1V		-20		20	ppm/V
Frequency Pulling At V _{Enable} = 3.3V±0.1V		-20		20	ppm/V

Phase Noise :

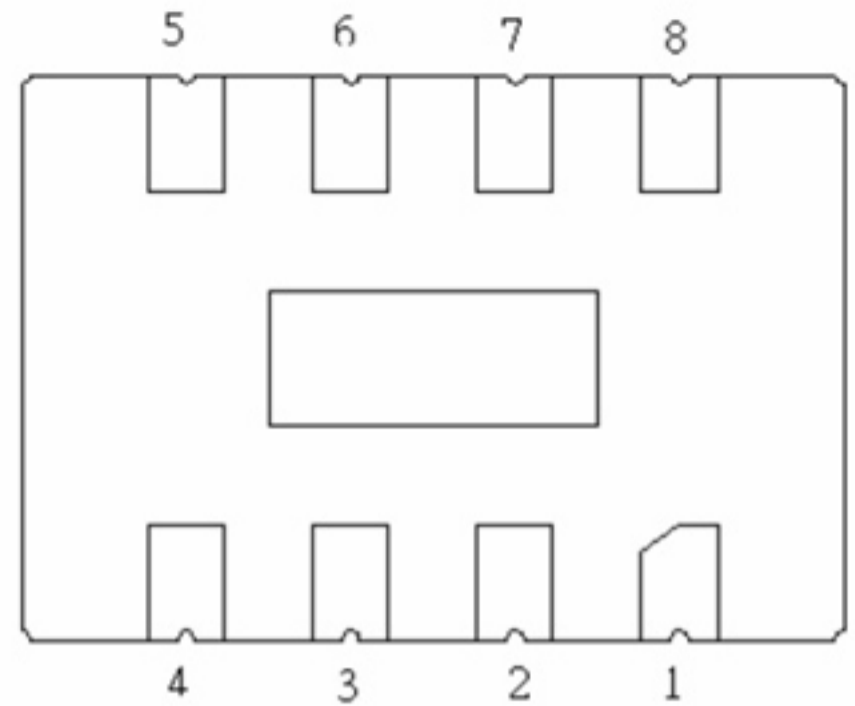
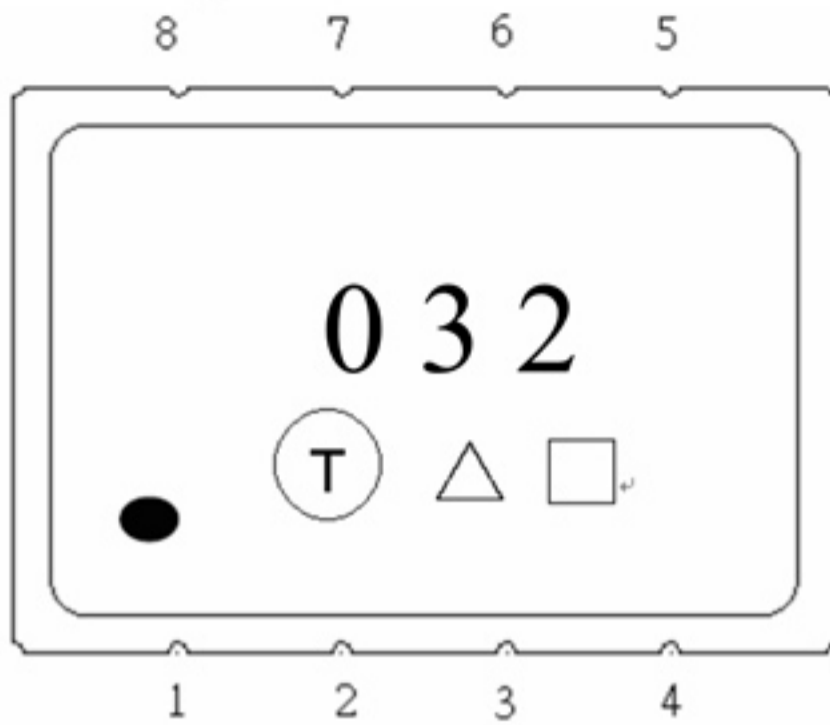
Parameter	Symbol	Limits			Units
		min.	typ.	max.	
Phase Noise @ 1KHz	PN1	-	-116	-113	dBc/Hz
Phase Noise @ 10 KHz	PN2	-	-144	-141	dBc/Hz
Phase Noise @ 100KHz	PN3	-	--154	-151	dBc/Hz

B. Phase Noise Response :



C. Mechanical Dimensions (mm):

- Package DIM.:



Terminal Number	Connection
1	V _{CC}
2	Ground
3	NC or Ground
4	Q Output
5	\bar{Q} Output
6	Ground
7	
8	ENABLE
LID	Ground

Product Code Table:

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	S	s	<u>S</u>	<u>s</u>

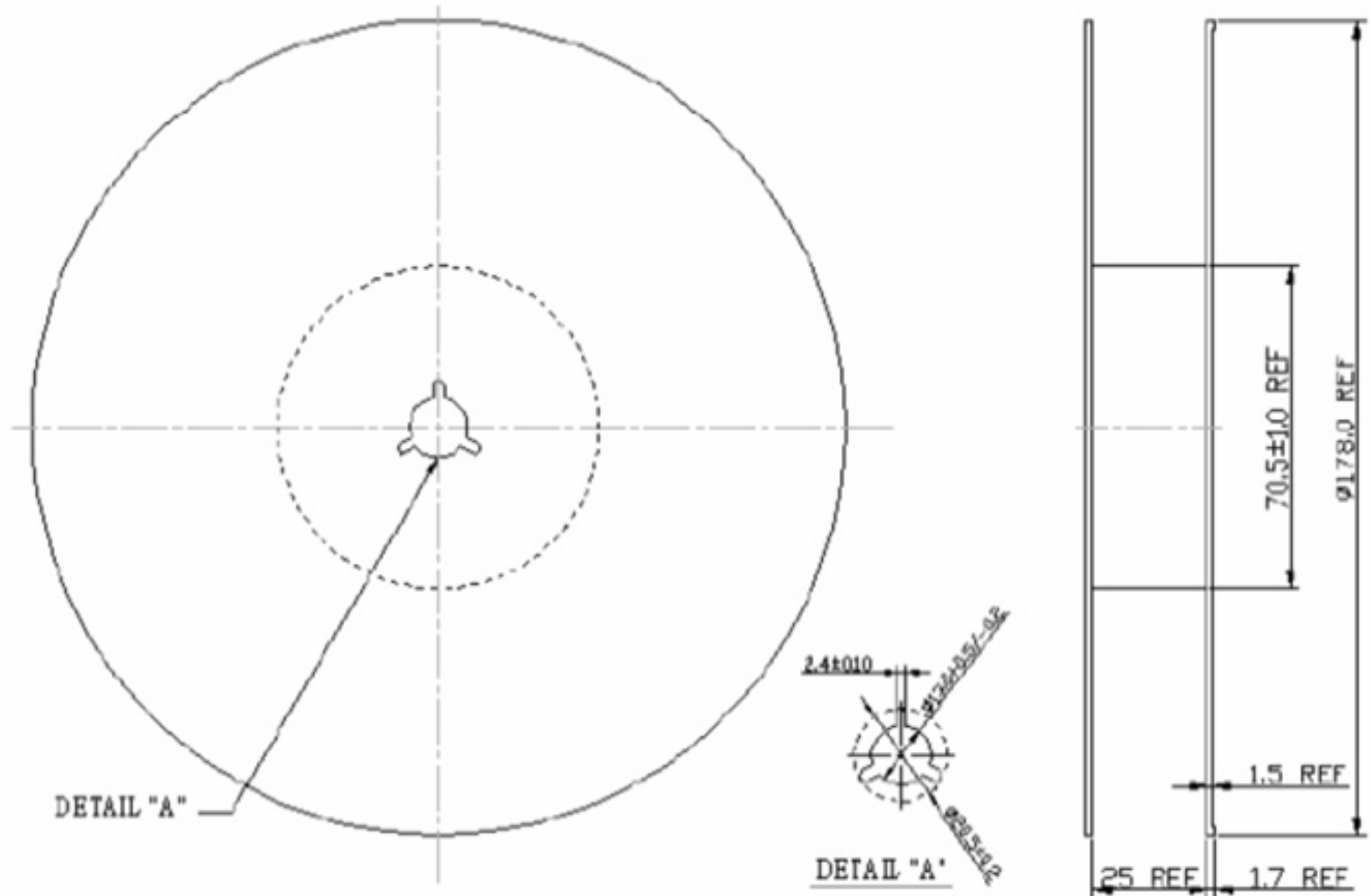
Date Code Table:

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

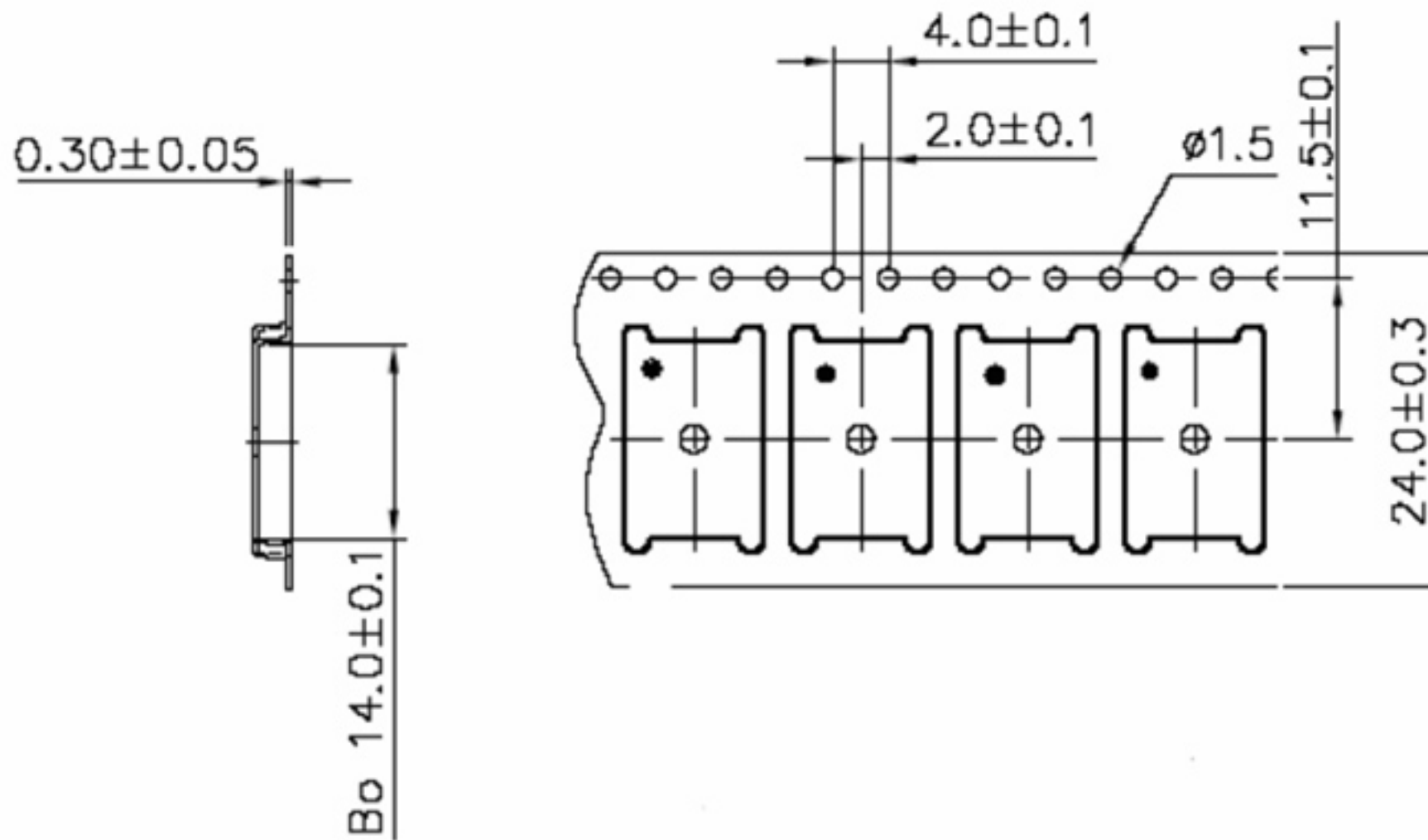
D. Packing:

1. Reel Dimension

(Please refer to FR-75D10 for packing quantity)



2. Tape Dimension



[NOTE]

1. UNIT : MM.
2. UNLESS OTHERWISE SPECIFIED TOLERANCE ON DIM. +/-0.1MM.
3. MATERIAL : CONDUCTIVE POLYSTYRENE.
4. COLOR : BLACK.
5. 10 PITCH CUMULATIVE TOLERANCE +/-0.2MM.

D. Recommended Reflow profile:

