

Issued Date : 20,Jul,2007

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**Messrs : e-Ride**

**Temperature Compensated Crystal Oscillator  
( VC-TCXO / TCXO )  
KT3225F27456ZAW28TA0  
(KT21F-ZAW28A-27.456M-T)  
Technical Specification**

**Preliminary**

**KYOCERA KINSEKI Corporation**

**KAGOSHIMA KOKUBU Plant  
TCXO Engineering Department**

## ***Revision History***

Revision No.	Revision Date	Revision Content and reason	Prepared By	Approved By
00	20.Jul.2007	The first edition	M.MATSUSHITA	A.HISAKO

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**TCXO KT3225F Parts Number****KT3225F27456ZAW28TA0**

F : Product Specification Code

27456 : Nominal Frequency

Z : Freq. Stability vs Temp. +/-5.0 ppm

A : Bottom Temperature Limit -40 deg.C

W : Upper Temperature Limit +85 deg.C

28 : Power Supply Voltage 2.8V (exp.)

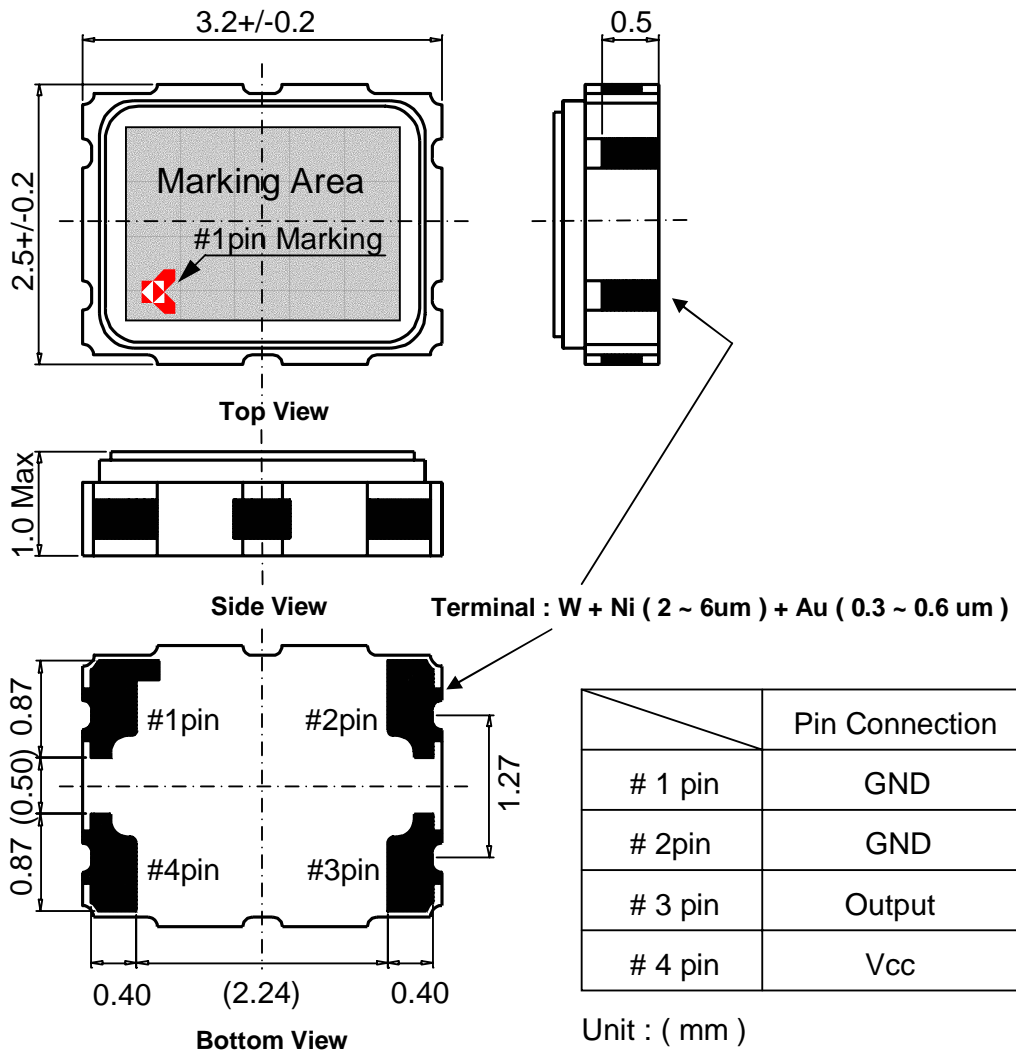
T : Specification Number

**TCXO KT3225F Electrical Characteristics**

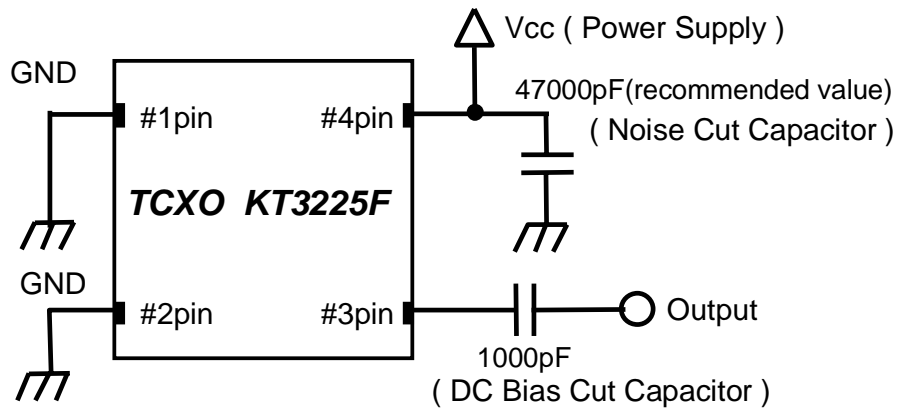
Symbol	Item	Condition	Specification	Unit	Remarks
---	Power Supply Voltage Range		2.3 to 3.6	V	
Vcc	Power Supply Voltage		Vcc+/-5%	V	
F0	Nominal Frequency		27.456000	MHz	
Topr	Operating Temperature		-40 to +85	deg.C	
Tstg	Storage Temperature		-40 to +85	deg.C	
Vout	Output Voltage	Load:10pF/10kohm	0.8(min)	Vp-p	Ta=-40 to +85deg.C
Icc	Power Supply Current		1.5(max)	mA	DC Bias
f0	Frequency Tolerance	Preset Frequency and after 2times reflow soldering	+/-2.0(max)	ppm	Ta=25+/-2deg.C
df/F	Frequency Stability	vs Temp -30 to +85deg.C	+/-0.5(max)	ppm	ref.:Ta=25deg.C
		vs Temp -40 to -30deg.C	+/-5.0(max)	ppm	ref.:Ta=25deg.C
		vs Load 10pF+/-10% 10kohm+/-10%	+/-0.2(max)	ppm	
		vs Voltage Vcc+/-5%	+/-0.1(max)	ppm	
---	Static Tem. hysteresis		+/-0.6(max)	ppm	
dfag	Frequency Aging Rate	Ta=25+/-2deg.C	+/-1.0(max)	ppm/Y	One Year
---	Harmonics		-8.0(max)	dBc	
---	SSB Carrier Noise	@1Hz offset	-50(max)	dBc/Hz	Ta=25+/-2deg.C
		@10Hz offset	-80(max)	dBc/Hz	
		@100Hz offset	-105(max)	dBc/Hz	
		@1KHz offset	-125(max)	dBc/Hz	
		@10KHz offset	-140(max)	dBc/Hz	

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### TCXO KT3225F Dimension & Pin Connections



### TCXO KT3225F Recommended Circuit

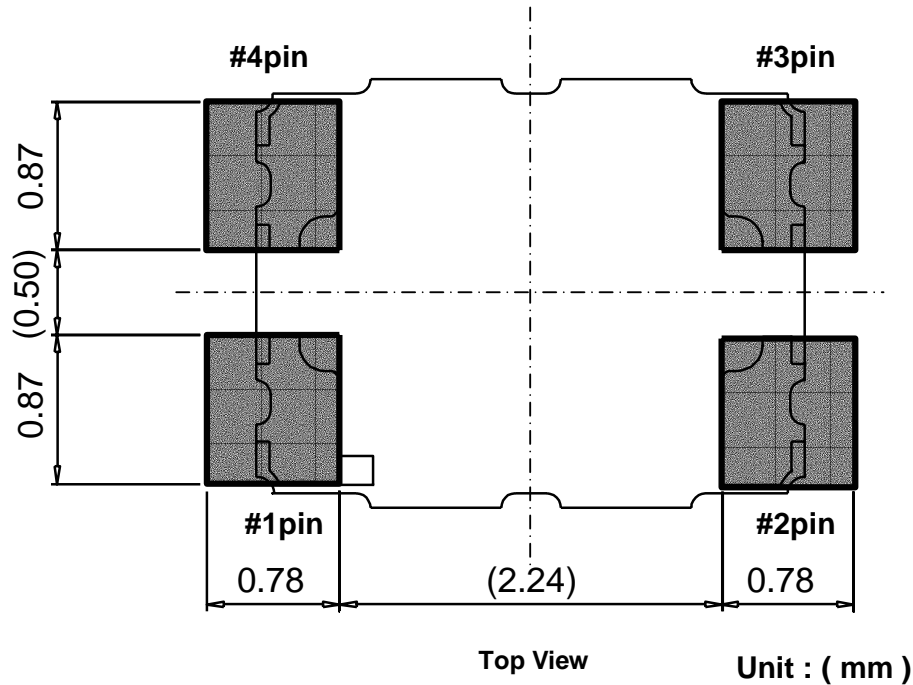


Note

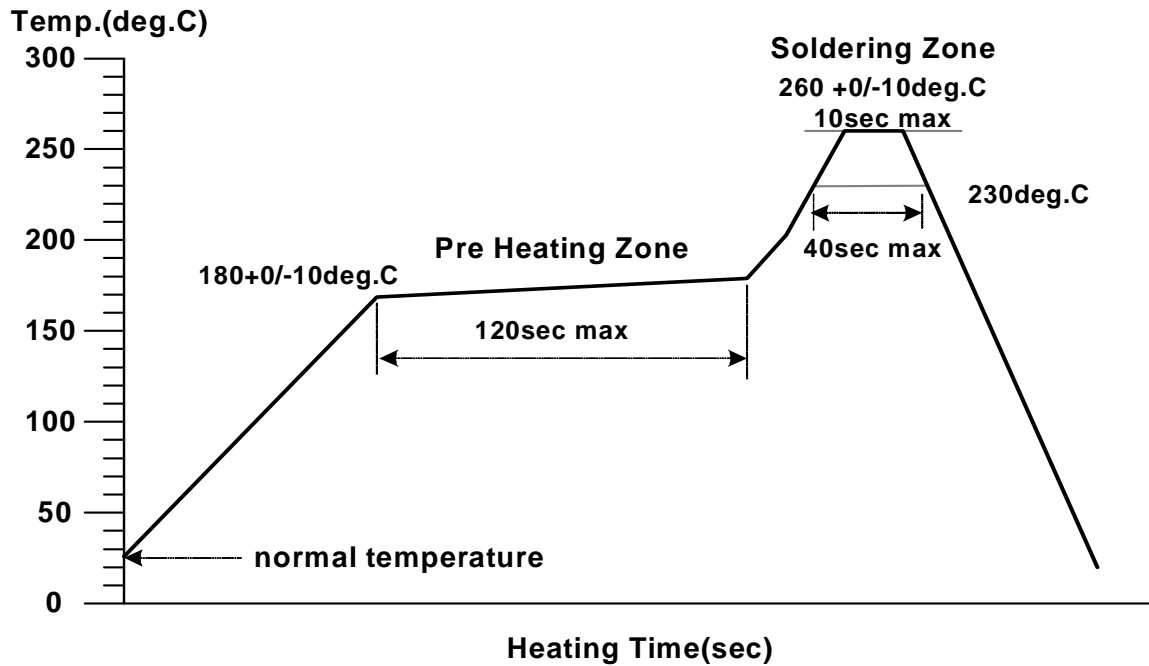
Because Noise Cut Capacitor change by the set, please confirm it

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### TCXO KT3225F Recommended Land Pattern



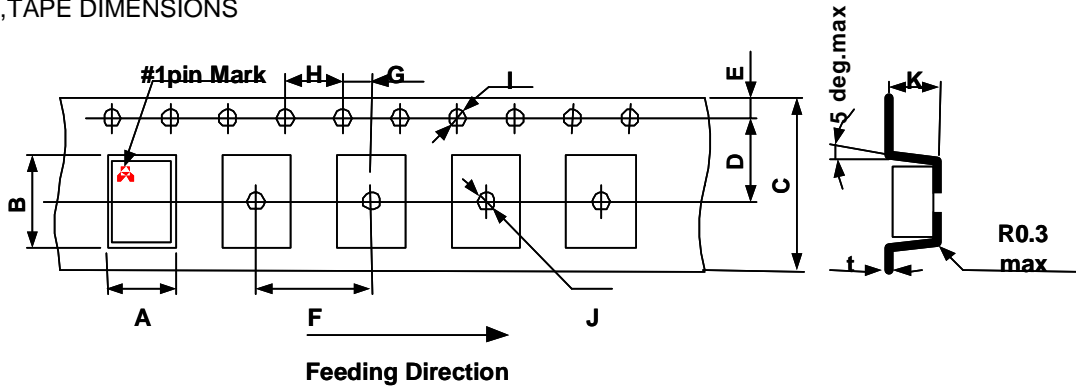
### TCXO KT3225F Recommended Reflow Soldering Condition ( Lead Free Version )



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## TCXO KT3225F TAPE&REEL SPEC

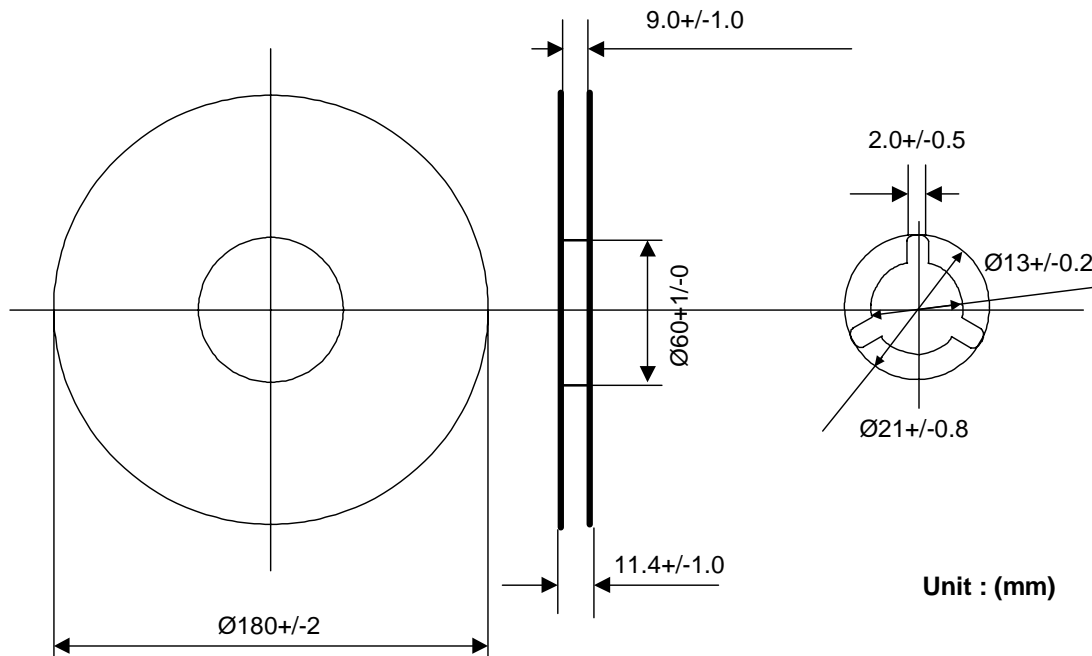
### 1, TAPE DIMENSIONS



Symbol	A	B	C	D	E
Dimension	2.8+/-0.1	3.5+/-0.1	8.0+/-0.3	3.5+/-0.05	1.75+/-0.1
Symbol	F	G	H	I	J
Dimension	4.0+/-0.1	2.0+/-0.05	4.0+/-0.1	F1.5+0.1/-0	F1.5+0.1/-0
Symbol	K	t			
Dimension	1.1+/-0.1	0.25+/-0.05			

Unit : (mm)

### 2. REELS DIMENSIONS



Unit : (mm)

REEL UNIT : 2000pcs / 1reel ( MIN 500pcs / 1reel )

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