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***Messrs : Digi-Key***

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***RoHS Compliant***

Temperature Compensated Crystal Oscillator  
( TCXO )

**KT2520F38400ZAW18TEK**

**Technical Specification**

**Preliminary**

**KYOCERA KINSEKI Corporation**



## *KT2520F Parts Number*

# **KT2520F38400ZAW18TEK**

Z : Freq. Stability VS Temp Special specification

A : Bottom Temperature Limit -40 deg.C

W : Upper Temperature Limit +85 deg.C

18 : Power Supply Voltage 1.8V

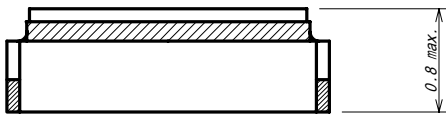
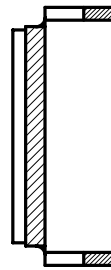
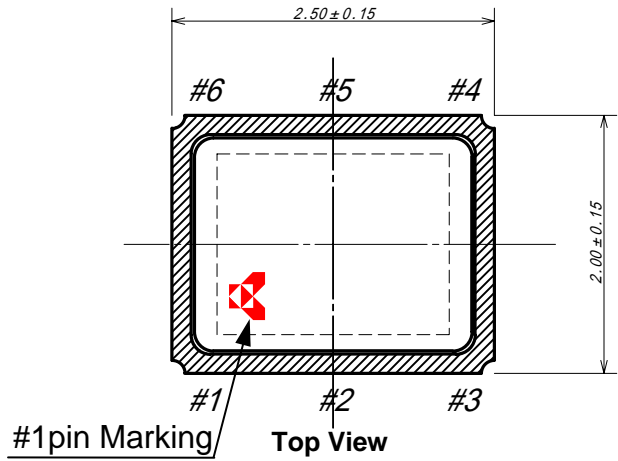
T : Specification Number

## *KT2520F Electrical Characteristics*

*Ta= -40deg.C to +85deg.C, Vcc=1.8V, Load 10kohm//10pF*

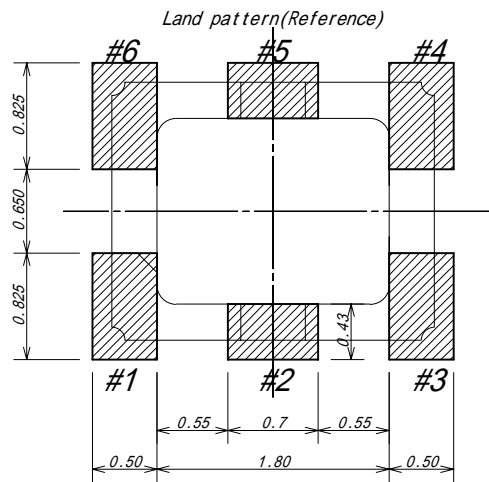
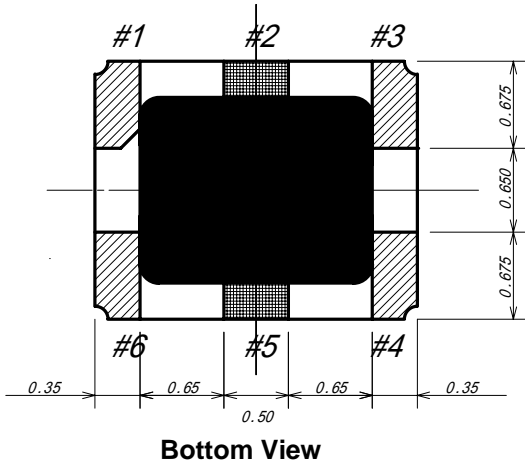
Symbol	Item	Condition	Specification	Unit	Remarks
Vcc	Power Supply Voltage		1.8+/-0.1	V	
F0	Nominal Frequency		38.400000	MHz	
Topr	Operating Temperature		-40 to +85	deg.C	
Tstg	Storage Temperature		-40 to +85	deg.C	
Vout	Output Voltage		0.8(min)	Vp-p	
Icc	Power Supply Current		2.0(max)	mA	
f0	Frequency Tolerance	Preset Frequency and after 2 times reflow	+/-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	+/-4.0(max)	ppm	ref.:Ta=25deg.C
		vs Load 10pF+/-10% 10Kohm+/-10%	+/-0.2(max)	ppm	
		vs Voltage 1.8V+/-0.1V	+/-0.2(max)	ppm	
dfag	Frequency Aging Rate	Ta=25+/-2deg.C	+/-1.0(max)	ppm/Y	One Year
---	Harmonics		-8.0(max)	dBc	

### KT2520F Dimension & Pin Connections & Recommended Land Pattern



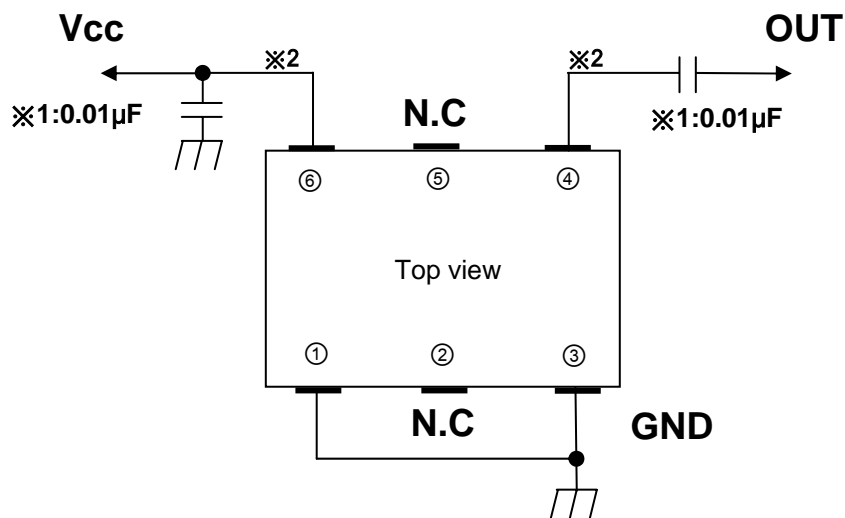
- #1 GND
- #3 GND
- #4 OUT
- #6 Vcc
- #2/#5 N.C

Unit : mm

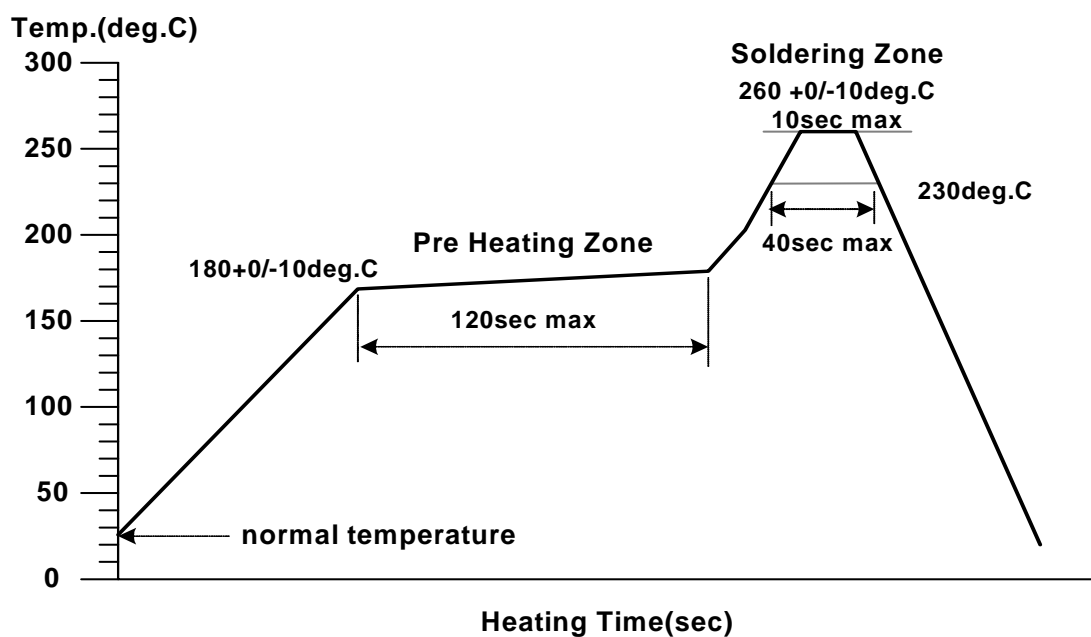


### KT2520F Recommended Circuit

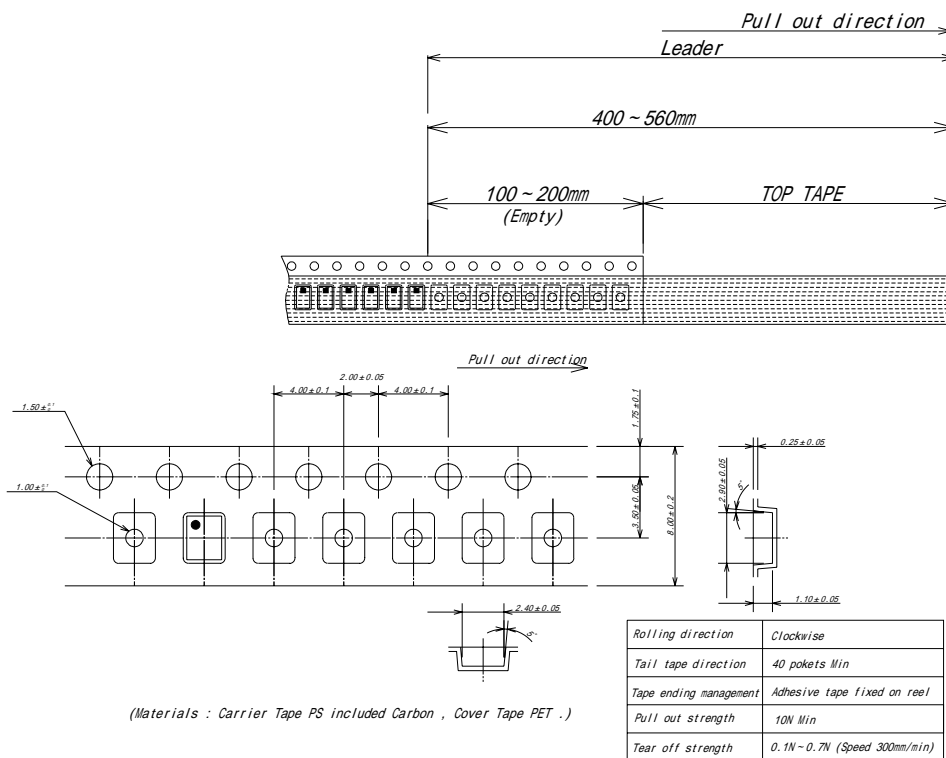
※1 Bypass Capacitor and DC-Blocking Capacitor do not build in this Parts. So, Bypass Capacitor and DC-Blocking Capacitor are attached outside and please use it. And these Capacitor should be ※2 placed as close as possible to the pin(No.4 and No.6).



### KT2520F Recommended Reflow Soldering Condition (Lead Free Version)

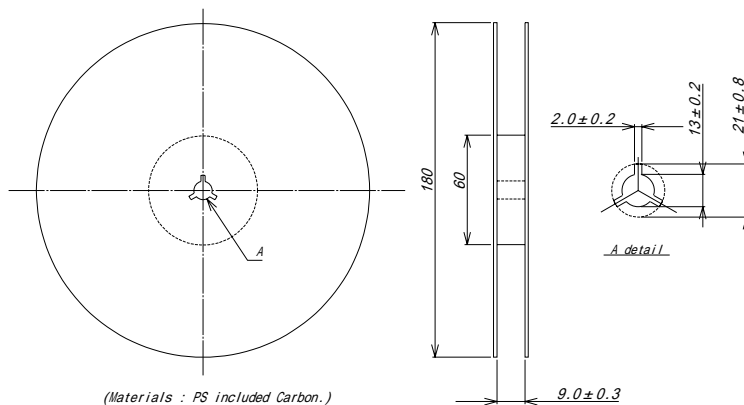


# KT2520F TAPE&REEL SPEC



(Materials : Carrier Tape PS included Carbon , Cover Tape PET .)

## Reel Dimensions



(Materials : PS included Carbon.)  
180 3000pcs max./1Reel

Reel diameter 180  
Quantity . 3000pcs max./1Reel  
Tape width 8mm  
Tape pitch 4mm  
Set direction Guide side , Fiduail marking  
For exclusive label No.

## **KT2520F Notice**

1. Please use soldering iron and the spot heater within the range of a solder heat test condition.
2. Units should be stored in a dry environment keeping away from the sun.
3. Don't leave units in high-Temperature and high-humidity environment due to terminal solderability.  
(Please keep 0°C ~ 40°C and 30% ~ 70%RH for recommendable storage condition)
4. The term of a guarantee of taping packing is 6 months. (0 deg.C to 40 deg.C,RH30% to 70%)
5. Disapprove of washing.
6. Unless we receive request for modification within 1 month from the issue date of this KKC specification sheet, we will supply products according to this specification.  
Also, if you'd like to modify specification of order, which has been placed with delivery within 1 month from the issue data of this specification sheet, we would like to discuss with you separately.
7. If you intend to use products listed on this specification for applications that may result in loss of life or assets (controls relating to safety, medical equipment, aeronautical equipment, space equipment, etc.), please do not fail to advise us of your intention beforehand.
8. In no event shall the company be liable for any product failure resulting from an inappropriate.  
Handling or operation of the product beyond the scope of its guarantee.
9. Information contained in this specification must not be quoted, reproduced or used for other purposes including processing either in part or in full without obtaining prior approval from the company.
10. Moisture sensitivity level  
MSL=1