

Issued Date : 13, Oct ,2011

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Messrs : MediaTek

RoHS Compliant

Temperature Compensated Crystal Oscillator
(TCXO)

KT2520F26000ZAW18TAK

Technical Specification

Preliminary

KYOCERA KINSEKI Corporation

Revision History

Revision No.	Revision Date	Revision Content and reason	Prepared By	Approved By
1	13.Oct.2011	The first edition.	R.SATAKE	N.NAKANO

KT2520F Parts Number**KT2520F26000ZAW18TAK**

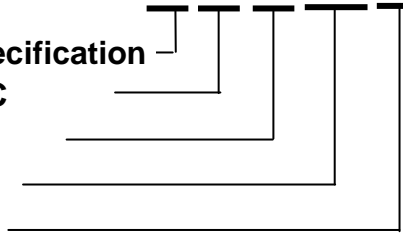
Z : Freq. Stability vs Temp. Special specification

A : Bottom Temperature Limit -40 deg.C

W : Upper Temperature Limit +85 deg.C

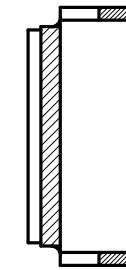
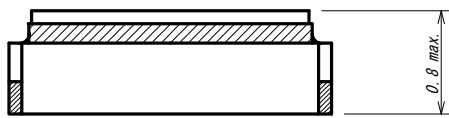
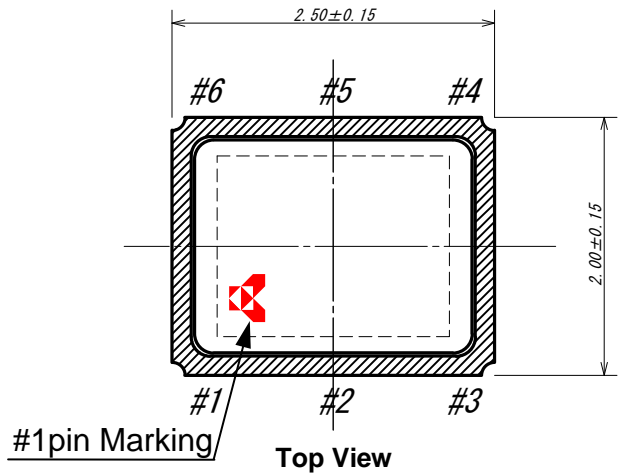
18 : Power Supply Voltage 1.8V

T : TCXO

**KT2520F Electrical Characteristics***Ta= -40deg.C to +85deg.C, Vcc=1.8V or 2.8V, Load 10kohm//10pF*

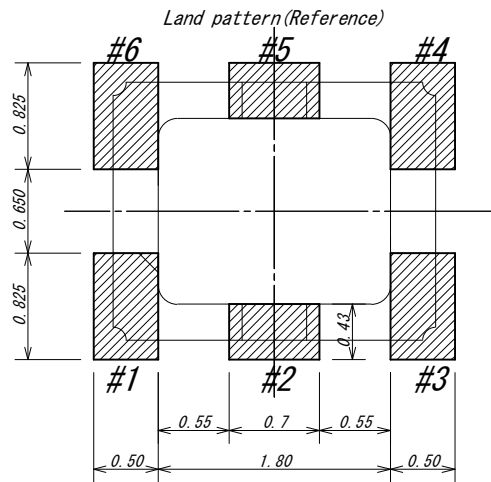
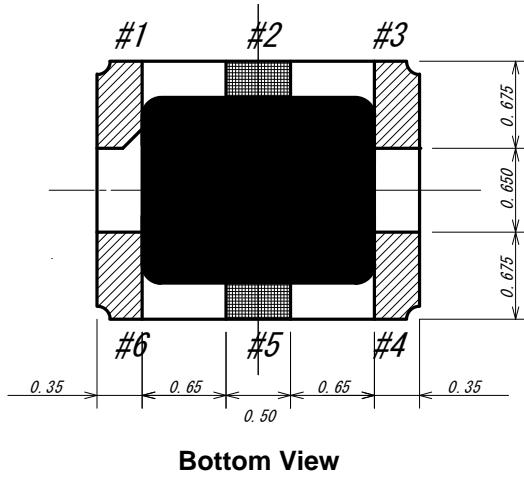
Symbol	Item	Condition	Specification	Unit	Remarks
Vcc	Power Supply Voltage		1.8+/-5% or 2.8+/-10%	V	
F0	Nominal Frequency		26.000000	MHz	
Topr	Operating Temperature		-40 to +85	deg.C	
Tstg	Storage Temperature		-40 to +85	deg.C	
Vout	Output Voltage		0.8(min)	Vp-p	
Icc	Power Supply Current		1.5(max)	mA	
f0	Frequency Tolerance	Preset Frequency and after 2 times reflow	+/-2.0(max)	ppm	Ta=25+/-2deg.C
df/F	Frequency Stability	vs Temp -20 to +65deg.C	+/-0.5(max)	ppm	ref:Ta=25deg.C
		vs Temp -30 to +85deg.C	+/-2.0(max)		
		vs Temp -40 to -30deg.C	+/-3.0(max)		
		vs Load 10pF+/-5% 10kohm+/-5%	+/-0.1(max)	ppm	
		vs Voltage Vcc+/-5%	+/-0.1(max)	ppm	
---	Frequency Stability Slope	Ta=-20 to +65deg.C	+/-0.05(max)	ppm/deg.C	Every 2 deg.C
		Ta=-30 to +85deg.C	+/-0.1(max)		
		Ta=-40 to -30deg.C	+/-0.35(max)		
dfag	Frequency Aging Rate	Ta=25+/-2deg.C	+/-1.0(max)	ppm/Y	1 year
			+/-1.5(max)	ppm/2Y	2 years
			+/-2.5(max)	ppm/5Y	5 years
			+/-5.0(max)	ppm/10Y	10 years
Tst	Start up Time	90%*Vp-p(min)	2.0(max)	msec	
		Within +/-0.5ppm			
---	Harmonics		-8.0(max)	dBc	
---	Hysteresis		+/-0.6(max)	ppm	
---	SSB Carrier Noise	@1Hz offset	-50(max)	dBc/Hz	Ta=25+/-2deg.C
		@10Hz offset	-80(max)		
		@100Hz offset	-105(max)		
		@1kHz offset	-130(max)		
		@10kHz offset	-145(max)		
		@100kHz offset	-150(max)		

KT2520F Dimension & Pin Connections & Recommended Land Pattern



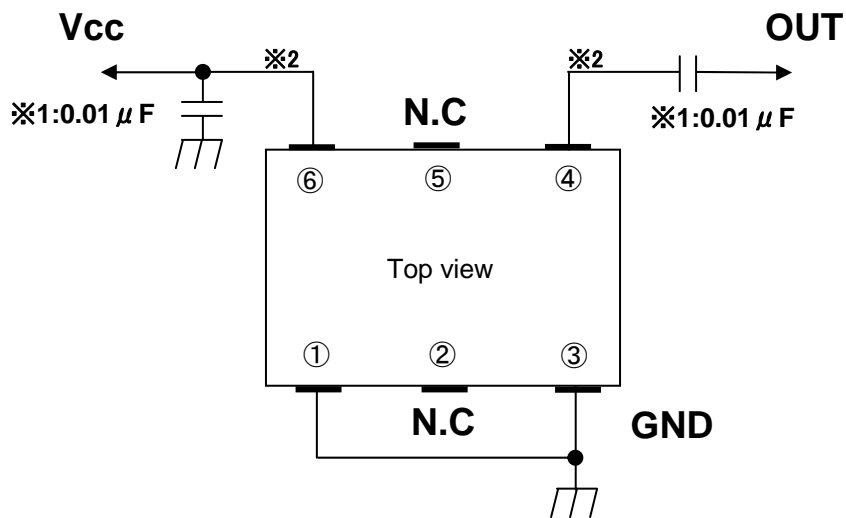
- #1 GND
- #3 GND
- #4 OUT
- #6 Vcc
- #2/#5 N.C

Unit : mm

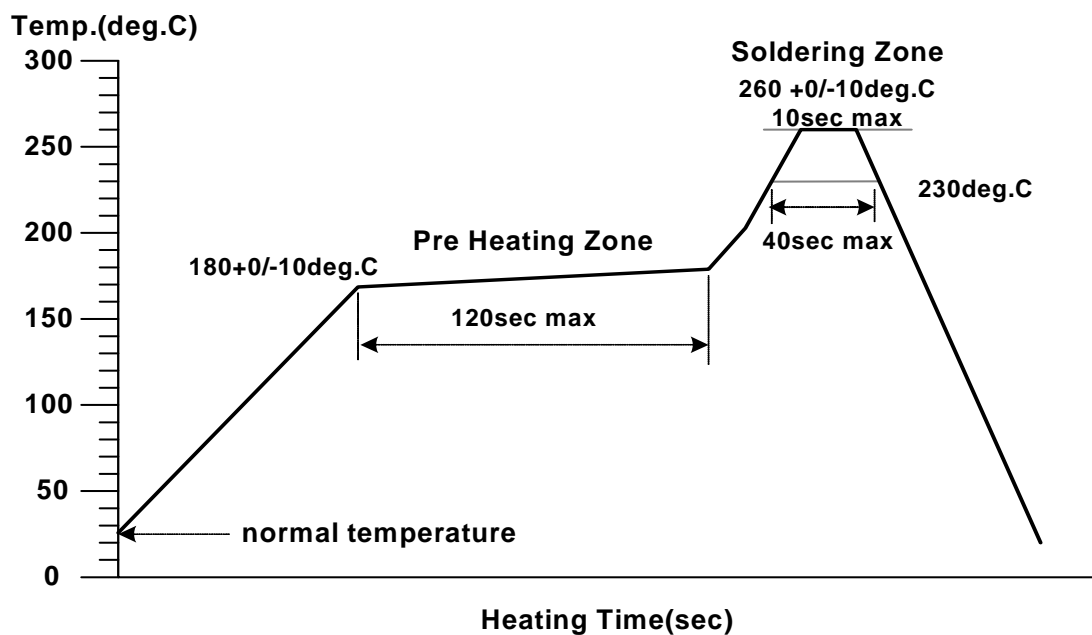


KT2520F Recommended Circuit

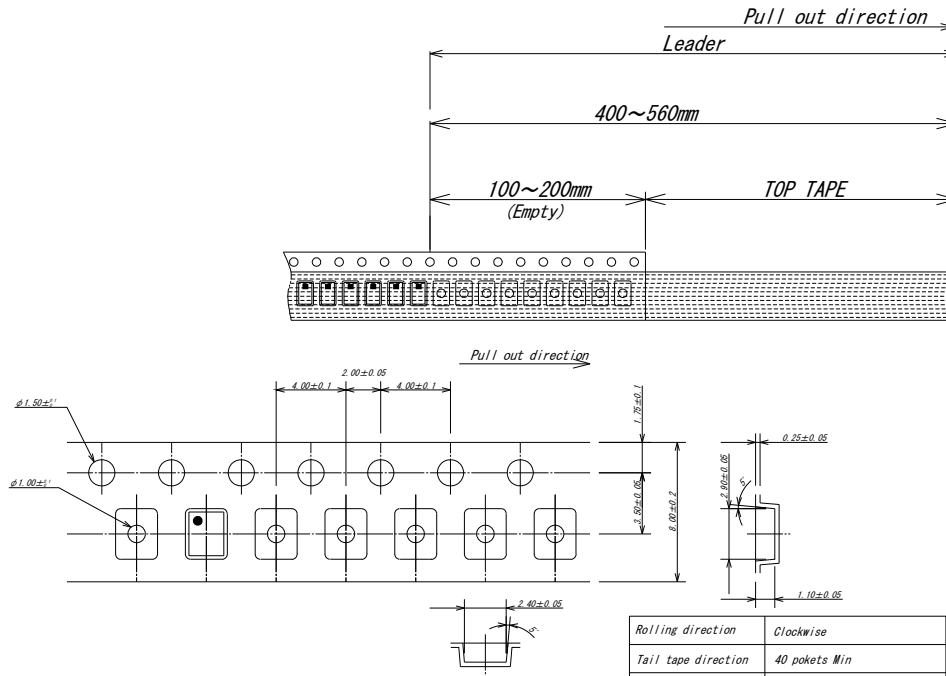
※1 Bypass Capacitor and DC-Blocking Capacitor do not build in this Parts. So, Bypass Capacitor and DC-Blocking Capacitor are attached outside and please use it. And these Capacitor should be ※2 placed as close as possible to the pin(No.4 and No.6).



KT2520F Recommended Reflow Soldering Condition (Lead Free Version)



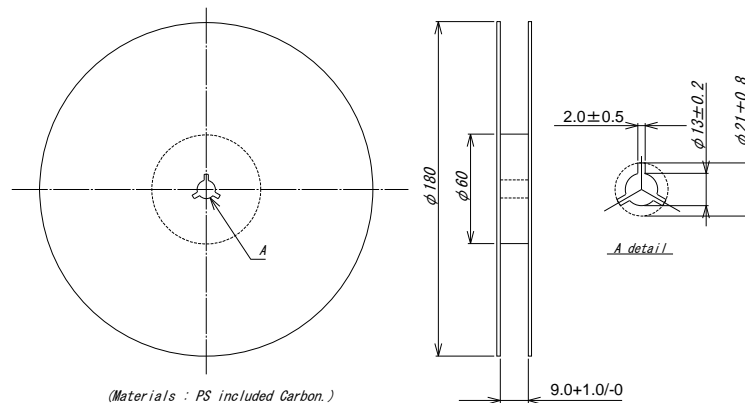
KT2520F TAPE&REEL SPEC



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

Rolling direction	Clockwise
Tape direction	40 pockets Min
Tape ending management	Adhesive tape fixed on reel
Pull out strength	10N Min
Tear off strength	0.1N~0.7N (Speed 300mm/min)

Reel Dimensions



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

- ① Reel diameter $\phi 180$
- ② Quantity 3000pcs max. / 1Reel
- ③ Tape width 8mm
- ④ Tape pitch 4mm
- ⑤ Set direction Guide side , Fiducail marking
- ⑥ 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