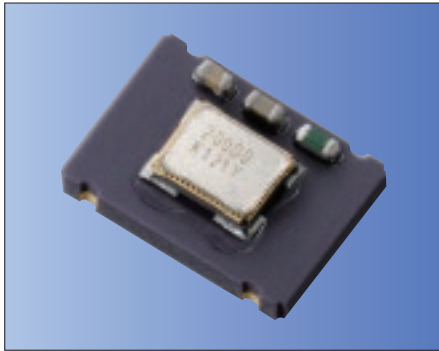


# Temperature Compensated Crystal Oscillators (TCXO)

## Surface Mount Type TCXO (LSI Type) KT7050 Series for Femtocell/ Stratum3



RoHS Compliant

### Features

- High stability and high reliability
- 2.7 to 5.5V drive available
- Clipped sine wave or CMOS level output
- Low phase noise
- Disable Function (KT7050A)

### Applications

- Femtocell, Stratum3
- SONENT/ SDH/ Ethernet

### How to Order

#### For Femtocell (Standard Spec.)

Freq. Temp. Chrst. :  $\pm 0.1 \times 10^{-6} / -10^{\circ}\text{C}$  to  $70^{\circ}\text{C}$

KT7050 A 20000 A G T 33 T xx  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

#### For Stratum3 (Standard Spec.)

Freq. Temp. Chrst. :  $\pm 0.28 \times 10^{-6} / -40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

KT7050 A 20000 K A W 33 T xx  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series		⑥ Upper Operating Temp.	
② Land Type		T	+70°C
A	10Pads	W	+85°C
B	4Pads	⑦ Supply Voltage	
③ Output Frequency		33	3.3V
④ Freq. Temp. Chrst.		⑧ Voltage Control Range	
A	$+0.1 \times 10^{-6}$	T	TCXO
K	$\pm 0.28 \times 10^{-6}$	Other*	VCTCXO
⑤ Lower Operating Temp.		* Customer Spec.	
A	-40°C	⑨ Option Code	
G	-10°C		
J	0°C		

Packaging (Tape & Reel 1000 pcs./ reel)

- Compliant to the GR1244-Core & GR253-Core
- Recommended in Microsemi's ZLAN-68 app. note for Stratum3 applications based on tests performed by Kyocera.

### Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	fo	Standard Frequency: 10, 12.8, 19.2, 19.44, 20, 20.48, 24.576, 26, 30.72	10	40	MHz
Frequency Tolerance	f <sub>tol</sub>	vs Temperature (-10 to +70°C)	-0.1	+0.1	$\times 10^{-6}$
		vs Temperature (-40 to +85°C)	-0.28	+0.28	
Supply Voltage	V <sub>CC</sub>		+2.7	+5.5	V
Current Consumption	I <sub>CC</sub>	20MHz CMOS output	-	5	mA
Frequency Aging	f <sub>age</sub>	20years aging @40°C Including temp characteristics, initial tolerance, rated power supply voltage change and load change.	-4.6	+4.6	$\times 10^{-6}$
Voltage Control Range	f <sub>cont</sub>	Positive *100k ohm min	$\pm 5$	$\pm 20$	$\times 10^{-6}$
Output Level	V <sub>pp</sub>	Clipped Sine, Load: 10k ohm // 10pF	0.8	-	Vp-p
Low Level Output Voltage	V <sub>OL</sub>	CMOS, Load: 15pF I <sub>OL</sub> =4mA	-	10% V <sub>CC</sub>	V
High Level Output Voltage	V <sub>OH</sub>	CMOS, Load: 15pF I <sub>OH</sub> =-4mA	90% V <sub>CC</sub>	-	V
Rise / Fall Time (10%V <sub>CC</sub> to 90%V <sub>CC</sub> )	tr/ tf	CMOS, Load: 15pF	-	5	ns
Symmetry	SYM	50% V <sub>CC</sub>	45	55	%
Phase Noise @20MHz	-	- 90 (@10Hz offset) -120 (@100Hz offset) -140 (@1kHz offset) -150 (@10kHz offset) -150 (@100kHz offset)			dBc/ Hz

Please contact us for other specifications.

### Dimensions

(Unit: mm)

### Recommended Land Pattern

(Unit: mm)

