

**Temperature Compensated Crystal Oscillator "KT2016K series"**  
**KYOCERA Part Number : KT2016K10000ZAW33ZGK**

Note: This is a preliminary specification.

If you would like to know official specification and details specification, please contact us.

1.Nominal condition						
Item	SYMB.	Min.	Typ.	Max.	Unit	Conditions
Operating Temperature Range	T <sub>use</sub>	-40	-	85	deg.C	
Storage Temperature Range	T <sub>stg</sub>	-40	-	85	deg.C	
Supply voltage	V <sub>cc</sub>	3.135	3.3	3.465	V	3.3V+/-5%
Load impedance	R <sub>1</sub>	9	10	11	kohm	
	CL	9	10	11	pF	
Control voltage range	V <sub>con</sub>	0.15	1.65	3.15	V	1.65V+/-1.5V

2.Electrical Characteristics							
Item	Electrical Specification					Conditions	
	SYMB.	Min.	Typ.	Max.	Unit		
Nominal frequency	f <sub>o</sub>	-	10.0	-	MHz		
Temp characteristics	f <sub>o_TC</sub>	-0.5	-	+0.5	x10 <sup>-6</sup>	T <sub>a</sub> = -30 to +85 deg.C	Referenced to the mid point between minimum and maximum frequency value over the specified temperature range
	f <sub>o_TC</sub>	-3.0	-	+3.0	x10 <sup>-6</sup>	T <sub>a</sub> = -40 to -30 deg.C	
Load characteristics	f <sub>o_Load</sub>	-0.2	-	+0.2	x10 <sup>-6</sup>	10kohm+/-10%, 10 pF+/-10%	
Voltage characteristics	f <sub>o_Vcc</sub>	-0.2	-	+0.2	x10 <sup>-6</sup>	3.3V+/-5%	
Aging characteristics	f <sub>o_age</sub>	-1.0	-	+1.0	x10 <sup>-6</sup> /Y	at 25+/-2 deg.C	
Frequency tolerance	f <sub>o_tol</sub>	-2.0	-	+2.0	x10 <sup>-6</sup>	After 2 times reflow soldering	at 25+/-2 deg.C
Output voltage	V <sub>pp</sub>	0.8	-	-	Vp-p	Clipped sine	
Current consumption	I <sub>cc</sub>	-	-	1.5	mA		
Harmonics	H <sub>m</sub>	-	-	-8.0	dBc		
Control voltage stability	V <sub>con</sub>	-15.0	-	-9.0	x10 <sup>-6</sup>	V <sub>con</sub> =0.15V	ref:V <sub>con</sub> =1.65V
	V <sub>con</sub>	+9.0	-	+15.0	x10 <sup>-6</sup>	V <sub>con</sub> =3.15V	

