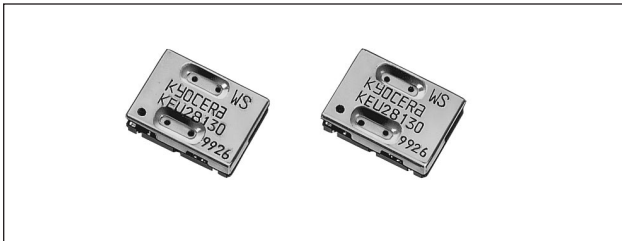


Temperature Compensated Crystal Oscillators KT16 Series



FEATURES

- Miniature SMD type (7.0x5.2.0x1.8mm)
- Frequency adjustment free after reflow soldering process
- AFC function available
- 2.7V, 3.0V, 3.3V drive available
- Frequency Stability = ± 2 ppm at 30 to +80°C

APPLICATIONS

- PDC, GSM, CDMA, TDMA

HOW TO ORDER

KT16 - D C V 30 L - 19.680M T

Packaging

T = Tape and reel 4,000 pcs/reel

Frequency (MHz)

12.800	14.850	19.440
13.000	16.800	19.680
14.400	19.200	19.800

AFC Function

V = Yes

Supply Voltage

28 = 2.8V, 30 = 3.0V

Upper Operating Temp.

V = 80°C, T = 70°C, R = 60°C

Lower Operating Temp.

C = -30°C, G = -10°C, E = -20°C

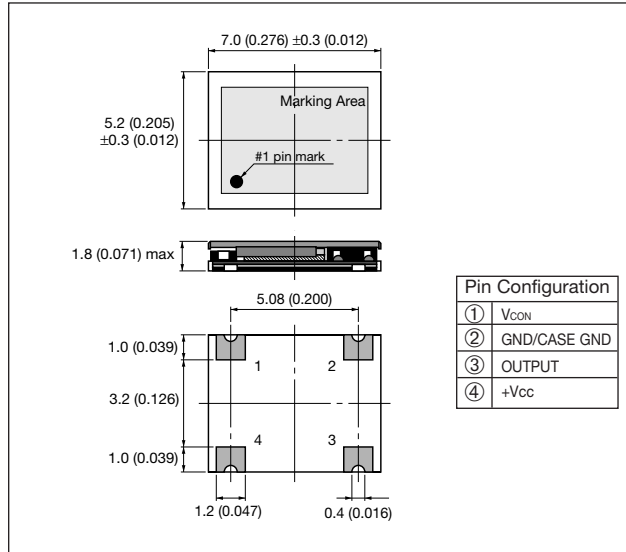
Frequency Stability

K = ± 5 ppm, E = ± 2.5 ppm, D = ± 2.0 ppm

Series

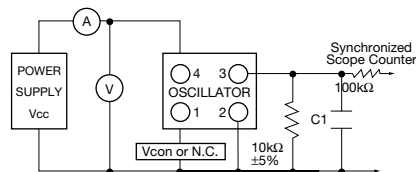
DIMENSIONS

millimeters (inches)

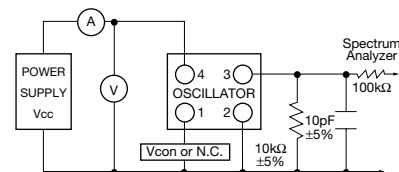


TEST CIRCUIT

Test Circuit 1 (Amplitude)



Test Circuit 2 (Harmonics and Frequency)



SPECIFICATIONS

Items	Code	Specifications		Unit	Remarks
		Cellular			
Supply Voltage	V _{CC}	2.7		V	—
		3.0			
		3.3			
Output Frequency	f _o	26.000	19.440	MHz	—
		19.680	14.400		
		13.000	12.800		
Operating Temperature	T _{opr}	-30 to +80		°C	—
Storage Temperature	T _{stg}	-40 to +85		°C	—
Frequency Stability	$\Delta f/f_0$	± 2.0 max.		ppm	vs temperature (after reflow)
		± 2.5 max.		ppm	vs load
		± 0.2 max.		ppm	vs voltage
		± 0.3 max.		ppm	—
Aging Rate	Aging	± 1.0 max.		ppm/year	25°C ± 2 °C
Output Voltage	V _{out}	0.8 min.		V _{p-p}	load 10k Ω /10pF
Supply Current	I _{CC}	1.5 max.		mA	—
Trimmer Control Range	$\Delta f/C$	—		ppm	—
Voltage Control Range	$\Delta f/V$	± 8.0 to ± 15		ppm	—
Harmonics	—	-3.0 max.		dBc	—