

O3 Type

1.6 x 1.2 mm SMD Crystal Oscillator

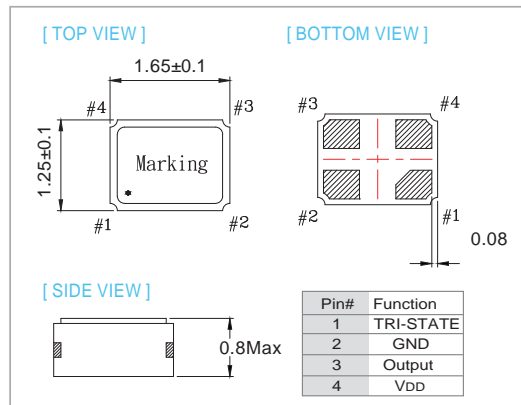
FEATURE

- Typical 1.6 x 1.2 x 0.8 mm ceramic SMD package
- Low Power Supply Voltage: 3.3, 2.5, and 1.8V supply options
- Clock Output: CMOS
- Tight symmetry (45 to 55%) available.
- Tri-state enable / disable mode.
- Pb-free/RoHS compliant

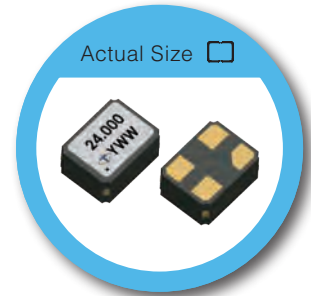
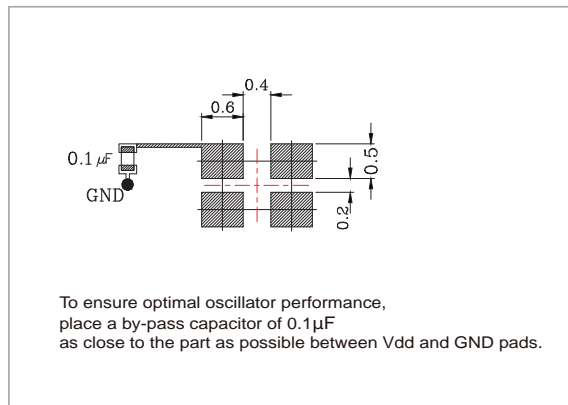
TYPICAL APPLICATION

- WLAN
- Mobile Phone
- DSC, Set-top Box, HDTV

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



RoHS Compliant

ELECTRICAL SPECIFICATION

Parameter	CMOS						Unit
	3.3V		2.5V		1.8V		
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (V _{DD})	2.97	3.63	2.25	2.75	1.71	1.89	V
Frequency Range	3	60	3	60	3	60	MHz
Standard Frequency	10,12,12.288,19.2,20,24,25,40,50						MHz
Supply Current	-	15	-	15	-	15	mA
Standby Current	-	10	-	10	-	10	µA
Duty cycle	45	55	45	55	45	55	%
Output Level	Output High		Output Low		Output Low		V
(CMOS)	0.9 x V _{DD}	-	0.9 x V _{DD}	-	0.9 x V _{DD}	-	V
Transition Time	Rise Time		Fall Time		Rise Time		nSec
(20% - 80%)	-	10	-	10	-	10	nSec
Startup Time	-	2	-	2	-	2	mSec
Tri-State mode	Enable		Disable		Enable		V
(Input to Pin 1)	0.7 x V _{DD}	-	0.7 x V _{DD}	-	0.7 x V _{DD}	-	V
Period Jitter(Pk-Pk)	-	40	-	40	-	40	ps
RMS Phase Jitter (Integrated 12 KHz~20 MHz)	-	1	-	1	-	1	ps
Output Driver Capability (CL)	-	15	-	15	-	15	pF
Aging (@25°C 1st year)	-	±3	-	±3	-	±3	ppm
Operating temp. range	-40	105	-40	105	-40	105	°C
Storage temp	-55	125	-55	125	-55	125	°C

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm			
	±20	±25	±50	±100
-20~+70	O	O	O	O
-30~+85	Δ	O	O	O
-40~+85	Δ	O	O	O
-40~+105	X	X	O	O

* O: Available Δ: Conditional X: Not available

* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration

Note: not all combination of options are available. Other specifications may be available upon request.

Specifications subject to change without notice.