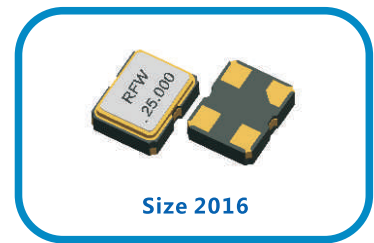


Feature

- Typical 2.05x1.65x0.75 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Packing: Tape & Reel, 3000 pcs per Reel.



Specifications

RoHS Compliant

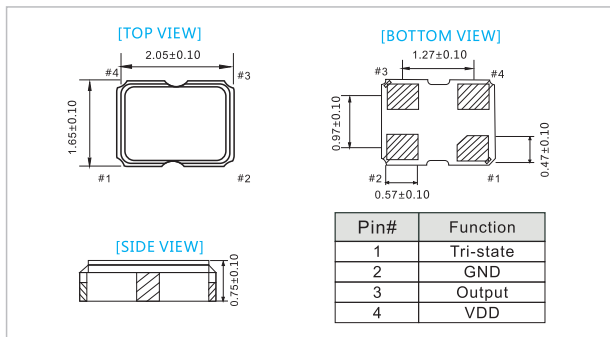


REACH Compliant

Parameter	3.3V		2.5V		1.8V		unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (Vdd) 10%	2.97	3.63	2.25	2.75	1.62	1.98	V
Frequency Range	1	50	1	50	1	50	MHZ
Supply Current	—	15	—	10	—	7	mA
Duty Cycle	45	55	45	55	45	55	%
Output Level (CMOS)							
Output High (Logic"1")	2.97	—	2.25	—	1.62	—	V
Output Low (Logic"0")	—	0.33	—	0.25	—	0.18	
Transition Time: Rise/Fall Time +							
1 MHz ≤ Fo < 20 MHz	—	4	—	4	—	5	nSec
20 MHz ≤ Fo ≤ 50 MHz	—	3	—	3	—	4	
Star Time	—	2	—	2	—	2	mSec
Tri-State(Input to Pin 1)							
Enable (High voltage or fllaing)	2.31	—	1.75	—	1.26	—	V
Disable (Low voltage or GND)	—	0.99	—	0.75	—	0.54	
Period Jitter(Pk-Pk)	—	40	—	40	—	40	pSec
Rms Phase Jitter(Integrated 12 kHz-20 MHz)	—	1	—	1	—	1	pSec
Standby Current	—	10	—	10	—	10	uA
Aging(@ 25°C 1st year)	—	±3	—	±3	—	±3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position
+ Transition times are measured between 10% and 90% of Vdd, with an output load of 15pF.

Outline Drawing



Frequency Stability Vs. Temperature Range

Temp.(°C)	Ppm				
	±20	±25	±30	±50	±100
-10 ~ +60	△	○	○	○	○
-20 ~ +70	X	△	○	○	○
-40 ~ +85	X	X	△	○	○
-40 ~ +105	X	X	X	△	○
-40 ~ +125	X	X	X	X	△

○: Available △: Conditional X: Not available

Ordering Information

Part Number Guide

RFW OSC	01 Package Size (mm)	33 Supply Voltage (V)	G Frequency Stability (ppm)	C Temp. Range (°C)	C Output Logic & Symmetry	1 Tri-State Function	- Dash	Freq. (Mhz)
	O1:2.0*1.6 OP1:2.0*1.6 Programmable OSC	XX=x.xV	C:±20 D:±25 E:±30 G:±50 H:±100	I:-10~+60°C C:-20~+70°C L:-40~+85°C X:-40~+105°C Y:-40~+125°C	C:C-MOS 15pF 40/60 D:C-MOS 15pF 45/55	1:Fixed-Freq. with Tri-State 2:NC		XX.XXXXXX

Example RFWO133GCC1-26.000000MHz
Crystal Oscillator, RoHS Compliant, 2.0*1.6mm; Voltage=3.3V; Freq. Stability: +/-50ppm; Operating Temp. Range: -20~70°C;
C-MOS Output; With Tri-state; Freq. 26.000000MHz.
**Not all combinations of options are available.