

OME Type

SMD2016 Crystal Oscillator Series

Feature

- ◆ Frequency Range: 0.032768~156.25MHz
- ◆ Typical 2.05 x 1.65 x 0.95mm ceramic SMD package.
- ◆ Tri-state enable/disable.
- ◆ Packing : Tape & Reel, 3000pcs / Reel.

Typical Application

- ◆ xDSL, WLAN, Fiber/10G-Bit Ethernet
- ◆ Notebook, PDA
- ◆ VGA card, PC main board.



Electrical Specifications

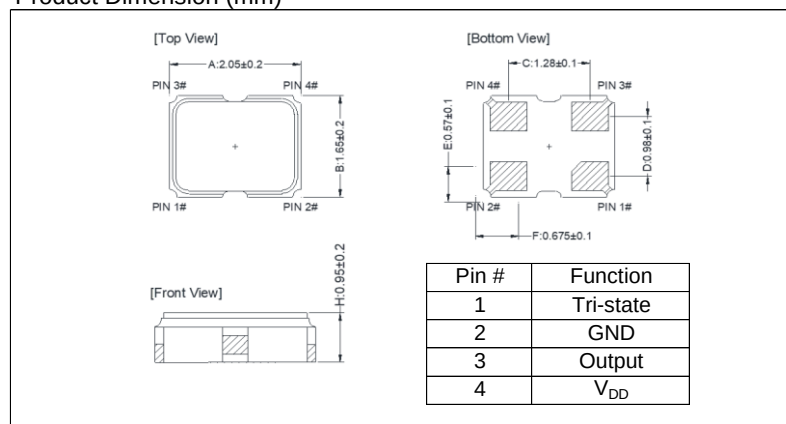
Parameter		Voltage						Unit	Remark
		1.8V		2.5V		3.3V			
		Min	Max	Min	Max	Min	Max		
Supply Voltage Variation(V _{DD})		V _{DD} ± 10%V _{DD}		V _{DD} ± 10%V _{DD}		V _{DD} ± 10%V _{DD}		V	-
Frequency Range		0.032768	125	0.032768	133	0.032768	156.25	MHz	-
Standard Frequency		2.048, 12.288, 24, 25, 26, 27, 50, 66, 66.667, 100, 125						MHz	-
Supply Current	F0≤1MHz	-	1	-	1	-	1	mA	Fundamental
	1MHz <F0≤70MHz	-	7	-	8	-	10	mA	Fundamental
	30MHz <F0≤70MHz	-	15	-	18	-	20	mA	3 rd Overtone
	70MHz <F0<133MHz	-	25	-	30	-	35	mA	3 rd Overtone
	133MHz ≤F0	-	35	-	40	-	45	mA	3 rd Overtone
Output Level (CMOS) Output High ("1")		1.62	-	2.25	-	2.97	-	V	-
Output Low ("0")		-	0.18	-	0.25	-	0.33	V	-
Rise / Fall Time	F0≤1MHz	-	50	-	50	-	50	nSec	10%V _{DD} to
	1MHz <F0<100MHz	-	5	-	5	-	5	nSec	90%V _{DD}
	100MHz ≤F0	-	3	-	3	-	3	nSec	Load CL:15pF
Start Time		-	5	-	5	-	5	mSec	-
Output Drive Capability (CL)		-	15	-	15	-	15	pF	-
Tri-State (Input to Pin 1) Enable		1.26	-	1.75	-	2.31	-	V	Or Floating
Disable		-	0.54	-	0.75	-	0.99	V	Or GND
Period Jitter (Pk - Pk)		-	40	-	40	-	40	pSec	-
RMS Phase Jitter		-	1	-	1	-	1	pSec	12kHz ~20MHz
Standby Current		-	10	-	10	-	10	uA	-
Aging		-3	3	-3	3	-3	3	ppm	@25°C 1st Year
Storage Temperature		-55	125	-55	125	-55	125	°C	-

Frequency Stability Vs. Operation Temperature Range

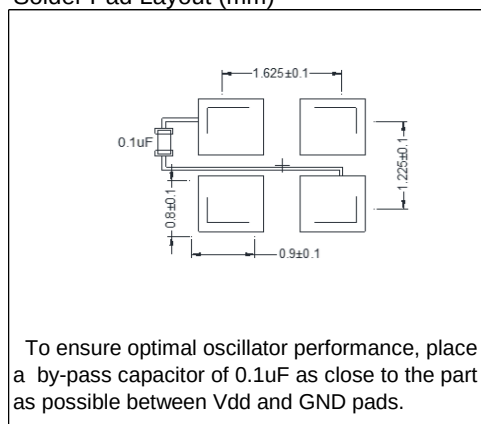
ppm	±20	±25	±50	±75	Remark
Operation Temp. (°C)					
-10~60	✓	✓	✓	✓	Note 1: ✓:Available, △:Conditional, X:Not available Note 2: Freq stability is inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration.
-20~70	✓	✓	✓	✓	
-40~85	X	✓	✓	✓	
-40~105	X	△	✓	✓	
-40~125	X	X	△	✓	

Dimension

Product Dimension (mm)



Solder Pad Layout (mm)



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

Specifications subject to change without notice.