

ECS-1618

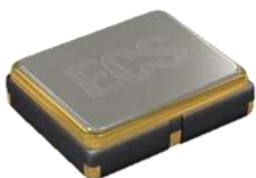
SMD Clock Oscillator

ECS-1618 (1.8V) subminiature SMD oscillators. Ideal for today's high density applications.

[Request a Sample](#)

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-1618



- RoHS Compliant
- MSL 1
- Lead Finish Au

Parameters	Conditions	ECS-1618 (+1.8V)			Units
		MIN	TYP	MAX	
Frequency Range		1.500		80.000	MHz
Operating Temperature	Standard	-10		+70	°C
	Extended (N Option)	-40		+85	°C
Storage Temperature		-55		+100	°C
Input Voltage	VDD	+1.71	+1.80	+1.89	VDC
Frequency Stability*	Option A			±100	PPM
	Option B			±50	PPM
	Option C			±25	PPM
Input Current	1.500 ~ 19.90 MHz			2.5	mA
	20.0 ~ 39.9 MHz			3.0	mA
	40.0 ~ 49.9 MHz			3.5	mA
	50.0 ~ 80.0 MHz			6.5	mA
Stand-by Current	Pin 1 = VIL			10	μA
Output Symmetry	@50% VDD Level			45/55	%
Rise and Fall Times	10% VDD to 90% Level			10	ns
"0" Level	VOL			10% VDD	VDC
"1" Level	VOH	90% VDD			VDC
Output Load	CMOS			15	pF
Disable Delay				150	ns
Startup Time				10	ms
Aging				±5	PPM

* Note: Inclusive of 25°C tolerance, operating temperature, input voltage change, load change, shock and vibration.

Part Numbering Guide: Example ECS-1618-200-BN-TR

ECS	-	Series	-	Frequency Abbreviations	-	Stability Tolerance	-	Temperature	-	Packaging
ECS		1618 = +1.8V		200 = 20 MHz		A = ±100 ppm B = ±50 ppm C = ±25 ppm		Blank = -10 ~ 70°C M = -20 ~ +70°C N = -40 ~ +85°C		TR = Tape & Reel

Package Dimensions (mm)

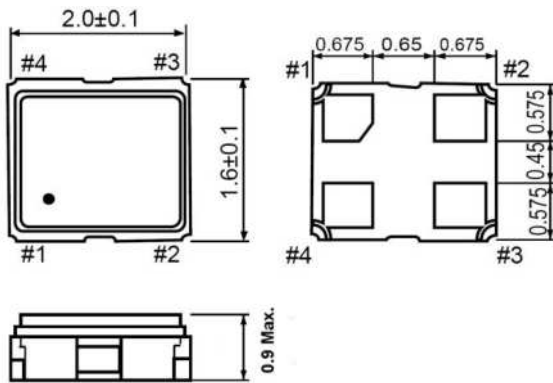


Figure 1) Top, Side, and Bottom views

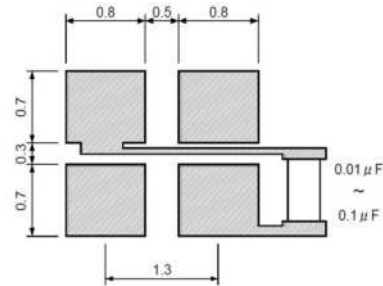


Figure 2) Land Pattern

Pin Connections	
#1	Tri-State
#2	Ground
#3	Output
#4	V _{DD}

Tri-State Control Voltage	
Pad 1	Pad 3
Open	Oscillation
VIH 70% VDD Min.	Oscillation
VIL 30% VDD Max.	No Oscillation

*Note: Internal crystal oscillation to be halted
(Pin #1=VIL)*