

ECS-3518/3525

SMD Clock Oscillator

ECS-3518 (1.8V) and ECS-3525 (2.5V) subminiature SMD oscillators, ideal for today's high density applications.

[Request a Sample](#)

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-3518/3525

Parameters	Conditions	ECS-3518 (+1.8V)			ECS-3525 (+2.5V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		1.544		125.00	1.544		125.00	MHz
Operating Temperature	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
Storage Temperature		-55		+125	-55		+125	°C
Supply Voltage	VDD	+1.62	+1.8	+1.98	+2.25	+2.5	+2.75	VDC
Frequency Stability*	Option A			±100			±100	PPM
	Option B			±50			±50	PPM
	Option C			±25			±25	PPM
Input Current	1.544 ~ 9.999 MHz			6			7	mA
	10.000 ~ 34.999 MHz			7			8	mA
	35.000 ~ 49.999 MHz			15			20	mA
	50.000 ~ 125.000 MHz			25			30	mA
Output Symmetry	@50% VCC Level			40/60			40/60	%
	@50% VCC Level (T Option)			45/55			45/55	%
Rise and Fall Times	10% VDD to 90% Level			5			6	ns
"0" Level	VOL			VCC *10%			VCC *10%	VDC
"1" Level	VOH	VCC *90%			VCC *90%			VDC
Output Load	HCMOS			30			30	pF
Startup Time				10			10	ms

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

Part Numbering Guide: ECS-3525-200-AN-TR

ECS - Series - Frequency Abbreviations - Stability - Temperature - Packaging

ECS

3518 = +1.8V
3525 = +2.5V

200 = 20 MHz

A = ±100 ppm
B = ±50 ppm
C = ±25 ppm

Blank = -0 ~ 70°C
M = -20 ~ +70°C
N = -40 ~ +85°C

TR = Tape & Reel
1K/Reel

- 1.8V or 2.5V Versions
- 3.2 x 5.0 mm Footprint
- Extended Temp Range Option
- PbFree/RoHS Compliant

Package Dimensions (mm)

Figure 2) Land Pattern

Figure 1) Top, Side, and Bottom views

Pad Connections	
#1	Tri-State
#2	Ground
#3	Output
#4	VCC

Tri-State Control Voltage	
Pad 1	Pad 3
Open	Oscillation
1 Level	Oscillation
0 Level	High Impedance

Frequency Abbreviations

FREQUENCY MHz	CODE
4.000	040
8.000	080
10.000	100
12.000	120
14.31818	143
24.000	240
33.333	333

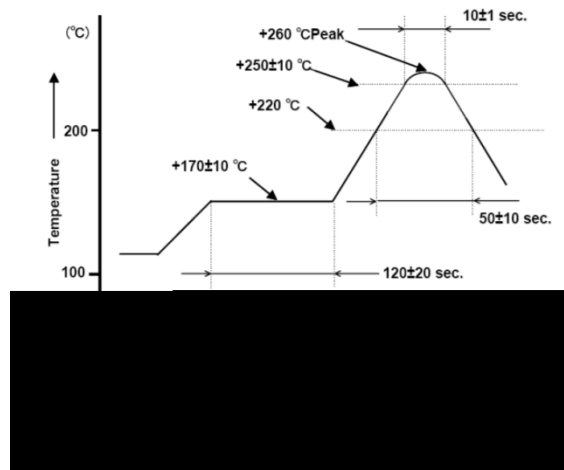
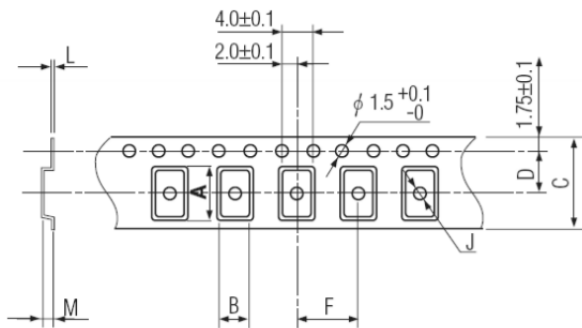


Figure 3) Suggested Reflow Profile

Tape Dimensions (mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
5.25	3.45	12.0	5.5	8.0	2.0	0.3	1.8	178	1000pcs

Package Data	
Item	Description
Lid	Metal
Base	Ceramic
Sealing	Seam Weld
Terminal	Tungsten (Metalized)
Plating	Gold/Nickel (Surface)/(Under)
RoHS	Compliant (PbFree)
MSL	1

Figure 4) Pocket Tape Dimensions