

The ECS-3225SMVQ is a miniature SMD AEC-Q200 HCMOS Oscillator with MultiVolt™ capability of 1.62 ~ 3.63 V with a tight stability of ± 20 ppm $-40 \sim +125^{\circ}\text{C}$. The 3.2 x 2.5 x 1.2 mm ceramic package is ideal for Automotive and Industrial applications.

[Request a Sample](#)

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-3225SMVQ SMD XO



- 3.2 x 2.5 mm Footprint
- Extended Temp Range
- RoHS Compliant
- Wide Supply Voltage
- Low Jitter
- Compatible with 1.8V, 2.5V or 3.3V Power Supply

DIMENSIONS (mm)

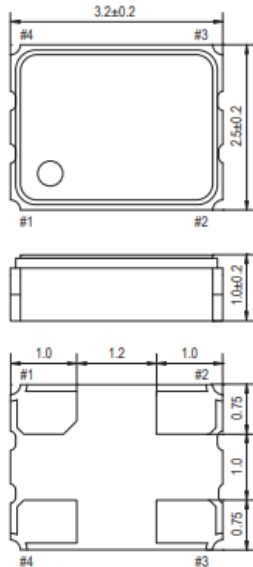


Figure 1) Top, Side, and Bottom views

PARAMETERS	CONDITIONS	ECS-3225SMVQ			UNITS
		MIN	TYP	MAX	
Frequency Range		8.000		60.000	MHz
* Frequency Stability	$-40 \sim +125^{\circ}\text{C}$ (DS Opt)			± 20	ppm
Supply Voltage		1.62		3.63	V
Output Load	CMOS			15	pF
Output voltage Level	VOL: 0.2 Vdd max. / VOH: 0.8 Vdd min. V DC				
Rise & Fall time	20% Vdd – 80% Vdd			5	nS
Start Up Time				10	mS
Phase Jitter	12 kHz to 20 MHz		0.362	0.5	pS
Duty Cycle	@ 1/2 Vdd		45/55		%
Input Current (No Load)			6	10	mA
Standby Current				10	μA
Operating Temp*	S Option	-40		+125	$^{\circ}\text{C}$
Storage Temp		-55		+125	$^{\circ}\text{C}$

* Frequency Stability includes initial tolerance, temperature, supply voltage and load change reflow frequency shift, and aging.

PAD CONNECTIONS

1	Tri-state
2	Gnd
3	Output
4	Vdd

Tri State Function

Pin 1	Output
0.7 * Vdd Min or NC	Active
0.3 * Vdd Max.	High Impedance

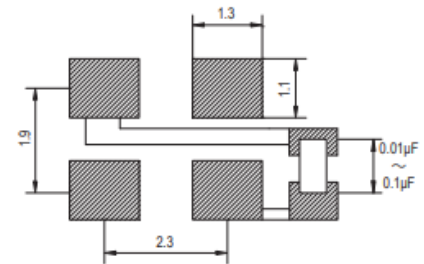


Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-3225SMVQ-500-DS-TR

ECS	SERIES	FREQUENCY ABBREVIATION	* STABILITY	TEMP RANGE -	PACKAGING
ECS	3225SMVQ 3.2 x 2.5 mm AEC-Q200 MultiVolt™ Oscillator Tight Stability	500 = 50.000 MHz See Developed Frequencies Pg. 2	D = ± 20 ppm F = ± 10 ppm G = ± 5 ppm	N = $-40 \sim +85^{\circ}\text{C}$ P = $-40 \sim +105^{\circ}\text{C}$ +S = $-40 \sim +125^{\circ}\text{C}$	-TR = Tape & Reel 1K/Reel

† 20 ppm is only option for $-40 \sim +125^{\circ}\text{C}$ temperature range.

Rev. 2024

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Standard Clock Oscillators](#) *category:*

Click to view products by [ECS Inc](#) *manufacturer:*

Other Similar products are found below :

[601252](#) [F335-25](#) [F535L-50](#) [NBXDDB017LN1TAG](#) [NBXHBA019LN1TAG](#) [SiT1602BI-22-33E-50.000000E](#) [SiT8209AI-32-33E-125.000000](#)
[SIT8918AA-11-33S-50.000000G](#) [SM4445TX-33.333M-T250](#) [F335-24](#) [F535L-12](#) [F535L-24](#) [SiT8503AI-18-33E-0.200000X](#)
[SIT9122AI2C233E300.000000X](#) [9120AC-2D2-33E212.500000](#) [ASFL1-48.000MHZ-LC-T](#) [SIT8920AM-31-33E-25.0000](#) [9102AI-](#)
[233N33E100.00000X](#) [9102AI-232H25S125.00000](#) [9102AI-133N25E200.00000](#) [3921AI-2CF-33NZ125.000000](#) [EC3620ETTS-24.000M TR](#)
[SG-210SEB 3.6864MB0](#) [SIT1602BC-83-33E-10.000000Y](#) [8003AI-12-33S-40.00000Y](#) [1602BI-13-33S-19.200000E](#) [8208AI-2F-18E-](#)
[25.000000X](#) [8208AI-8F-33E-66.666666X](#) [NX7031E0125.000000](#) [SiT1602BI-23-33E-25.000000G](#) [SiT1602BC-13-33E-50.000000E](#)
[NX51500001](#) [SiT1602BI-22-33E-12.000000E](#) [NX71C50003](#) [KN3270029](#) [SiT1602BI-22-33E-25.000000E](#) [SiT1602BI-12-33E-48.000000E](#)
[CCHD-575-25-24.000](#) [SG3225HBN 100.000000M-CJGA3](#) [SG3225HBN 156.250000M-CJGA3](#) [9120AI-2B2-25E200.0000](#) [9365AC-1E2-](#)
[33E156.250000X](#) [9365AC-1E2-33E156.253906X](#) [KK3270021](#) [HX7124001Q](#) [9003AC-23-18DQ-40.00000Y](#) [SG7050CAN 26.000000M-](#)
[TJGA3](#) [632L3I007M37280](#) [FO3HFCYM0.032768-T3](#) [SiT1602BI-23-18E-33.333330G](#)