



The sub miniature ECS-TXO-2520 is a miniature SMD HCMOS TCXO. The 2.5 x 2.0 x 0.9 mm ceramic package is ideal for wireless IOT applications where stability is critical.

ECS-TXO-2520 SMD HCMOS TCXO

Request a Sample



OPERATING CONDITIONS/ ELECTRICAL CHARACTERISTICS

ECX-2520 SMD HCMOSTCXO



- Low Profile
- 2.5 x 2.0 mm Footprint
- Extended Temp Range
- RoHS Compliant

DIMENSIONS(mm)

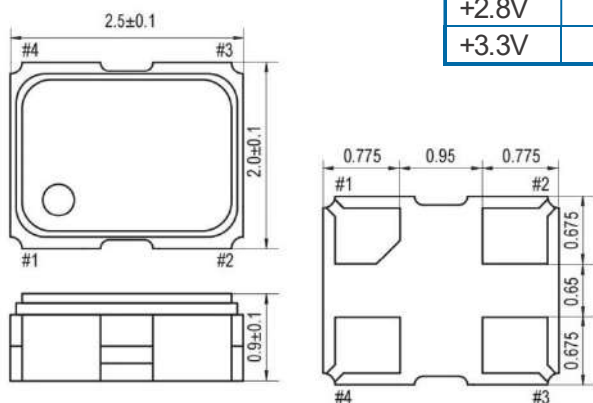


Figure 1) Top, Side, and Bottom views

PARAMETERS	CONDITIONS	ECS-TXO-2520			UNITS
		MIN	TYP	MAX	
Frequency Range		3.200		55.000	MHz
Frequency Stability	Tolerance at +25°C			± 2.0	ppm
	Vs. Temp (-40 ~ +85°C)			± 2.5	ppm
	Voltage Change Vdd ±5%			±0.2	ppm
	Load Change (±10%)			±0.2	ppm
Aging	Per year @ +25°C			±1.0	ppm
Supply Voltage (Vdd)	Specify in P/N	+2.5, +2.8, +3.3 ±10%			V DC
Standby Current				10	µA
Output	HCMOS		15		pF
Output voltage Level	VOL: 10%Vdd max./ VOH: 90%Vdd min. V DC				
Rise & Fall time	10%Vdd – 90%Vdd			5	ns
Duty Cycle	@ 1/2 Vdd			45/55	%
Phase Noise	@ 10 KHz offset		-145		dBc/ Hz

CURRENT CONSUMPTION, mA Max.

FREQ.	3.2~ 10 MHz	10.1~ 20 MHz	20.1~ 30 MHz	30.1~ 40 MHz	40.1 ~55 MHz
+2.5V	3.1	3.7	4.2	4.6	5.5
+2.8V	3.4	4.1	4.7	5.2	6.0
+3.3V	4.0	4.8	5.5	6.0	7.0

PAD CONNECTIONS

1	Tri-state
2	Gnd
3	Output
4	Vdd

Tri State Function

Pin 1	Output
High or NC	Active
Low	Disable Hi-Z

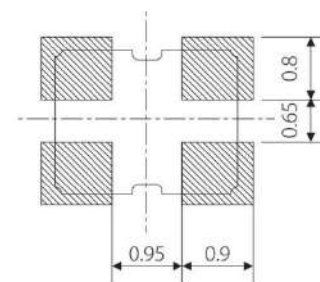


Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE Example ECS-TXO-2520-33-160-AN-TR

ECS - SERIES	FREQUENCY ABBREVIATION	STABILITY	TEMP RANGE	PACKAGING
TXO-2520 2.5 x 2.0 mm TCXO	25 = +2.5V 28 = +2.8V 33 = +3.3V 160 = 16.000 MHz See Developed Frequencies Pg.2	* A = ±2.5 ppm B = ± 1.5 ppm C = ± 1.0 ppm	L = -10 ~ +70°C M = -30 ~ +70°C * N = -40 ~ +85°C	TR= Tape & Reel 1K/Reel

* Standard specification, contact ECS for custom Options

Rev.2017



ECS-TXO-2520
SMD HOMOSTCXO



FREQUENCY ABBREVIATIONS

FREQUENCY MHz	CODE
5.000	050
10.000	100
12.000	120
16.000	160
20.000	200
24.000	240
25.000	250
32.000	320
40.000	400
44.000	440

SOLDER PROFILE

Peak solder Temp +260°C Max 10 sec Max.

2 Cycles Max.

MSL 1, Lead Finish Au

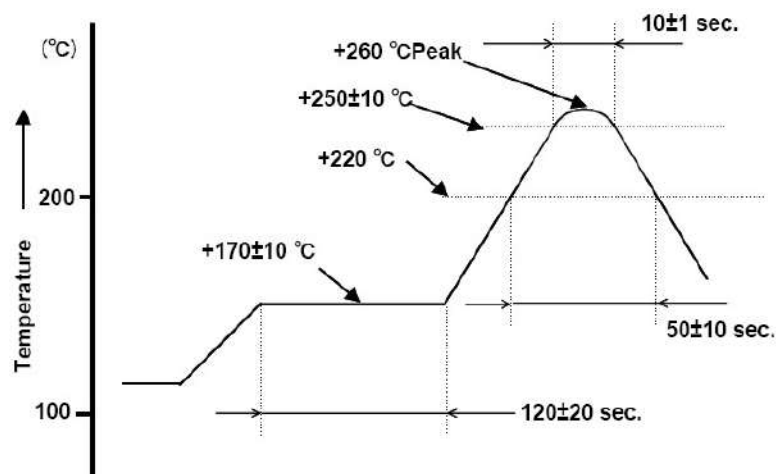
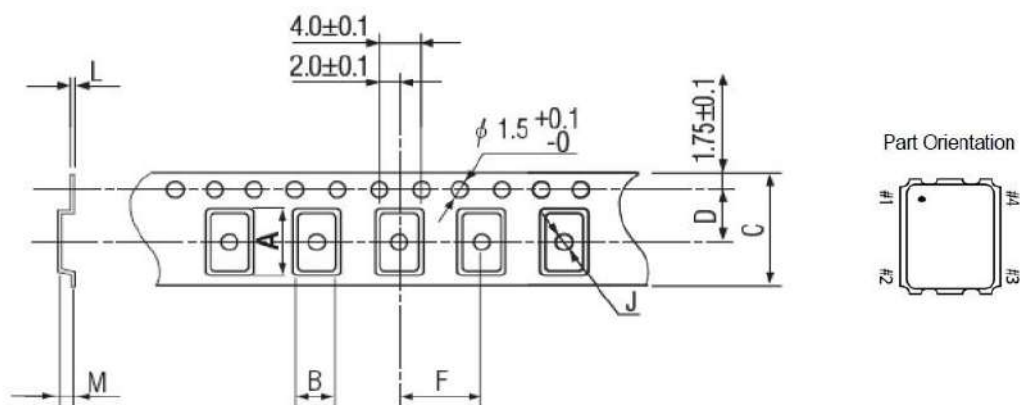


Figure 1) Suggested Reflow Profile

POCKET TAPE DIMENSIONS(mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
2.8	2.3	8.0	3.5	4.0	1.0	0.25	1.1	180	1000pcs