

S2520 2.5×2.0 SMD Crystal

Think SAW, Think STRONG!

DATASHEET



- Tolerances down to 10 PPM
- Stabilities down to 10 PPM

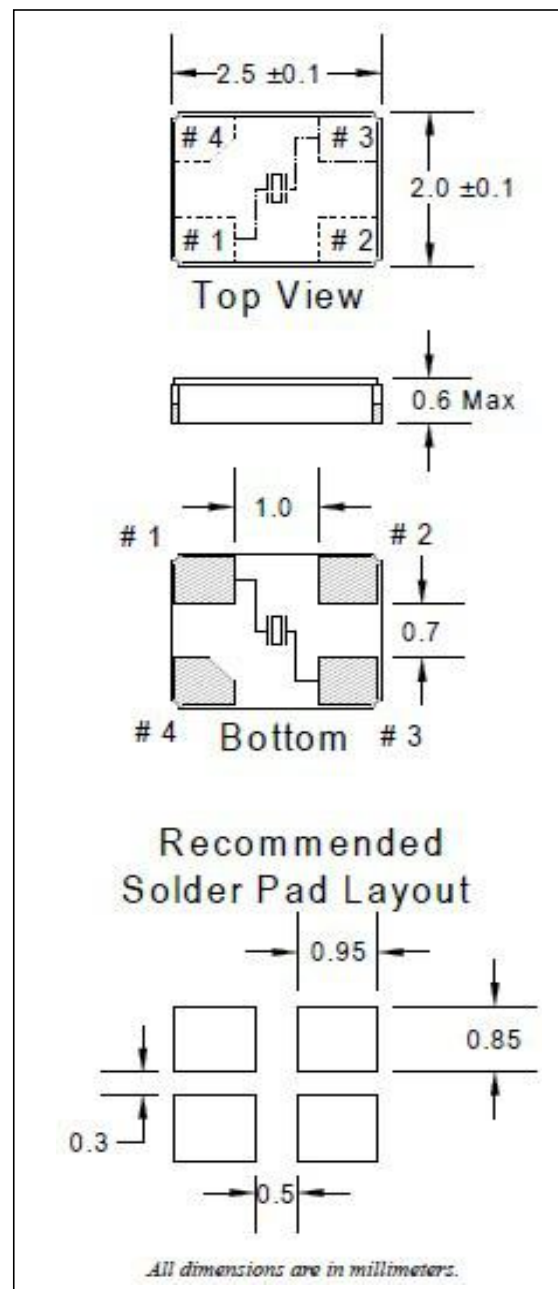
• S2520 STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	12.000 ~ 80.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C Over Operating Temp Range	(See options below)
Temperature Range Operating (T _{OPR}) Storage (T _{STG})	(See options below) -55°C ~ +125°C
Shunt Capacitance (C ₀)	3 pF
Load Capacitance (C _L)	(See options on page 2)
Drive Level	100 µW
Aging per year	±5 PPM
Reflow Soldering Temperature	260°C x 10 Seconds (2 Cycles)
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS / REACH Compliant	Yes

Developed Frequencies

16.000	19.200
19.680	19.800
24.000	26.000
32.000	48.000
54.000	

Frequency Range (MHz)	Operating Mode	Max ESR Ω
12.000 ~ 15.999999	Fundamental	150
16.000 ~ 19.999999	Fundamental	100
20.000 ~ 29.999999	Fundamental	80
30.000 ~ 80.000	Fundamental	50



• Available Operating Temperatures and Stabilities*

Operating Temperature	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM
-10°C to +60°C	O	O	O	O	O	O
-20°C to +70°C	O	O	O	O	O	O
-40°C to +85°C	O	O	O	O	O	O

Key: O=Available, X=Not Available, Δ=Consult Fox Technical Support

*Does not imply a stocked part.

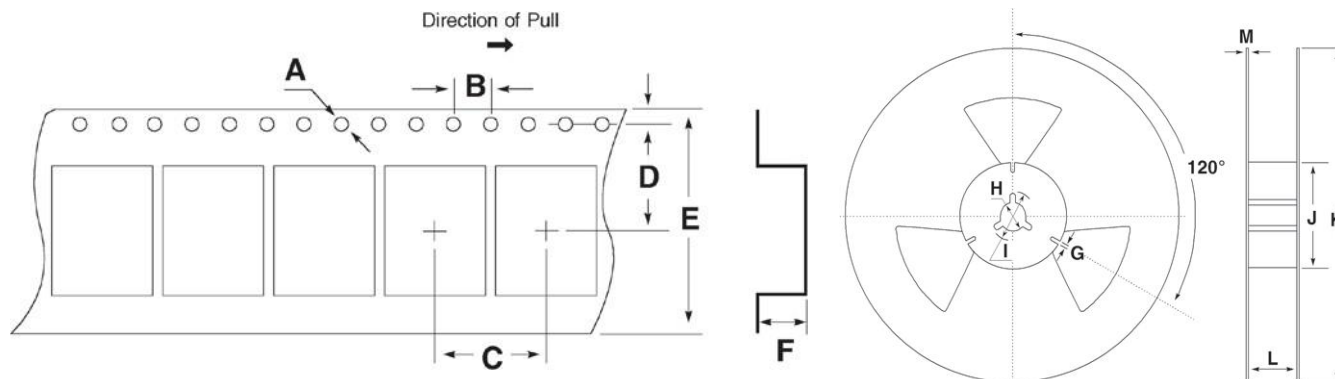
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• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel QTY	G	H	H	J	K	L	M
Ø1.5	4.0	4.0	3.5	8.0	0.65	3,000	2.0	Ø13	Ø21	Ø60	Ø180	9.0	2.0



Available Options & Part Identification for Crystal Model S2520*

S2520-12.000M-8-10-10-E

S	2520	12.000M	8	10	10	E
STRONG	Model Number	Frequency (MHz)	Load Capacitance 8 = 8 pF 10 = 10 pF 12 = 12 pF 15 = 15 pF 18 = 18 pF 20 = 20 pF 7 = 7 pF 9 = 9 pF	Tolerance 50= 50 PPM 30= 30 PPM 25= 25 PPM 20 = 20 PPM 15= 15 PPM 10= 10 PPM 5=5PPM	Stability 50= 50 PPM 30= 30 PPM 25= 25 PPM 20 = 20 PPM 15= 15 PPM 10= 10 PPM 5=5PPM	Operating Temperature A= 0 ~ +60 °C B= -10 ~ +60 °C C= -10 ~ +70 °C D= -20 ~ +70 °C E= -40 ~ +85 °C F= -40 ~ +105 °C D= -40 ~ +125 °C G= -55 ~ +125 °C



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*Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

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