

Table 1. Electrical Performance

Parameter	Symbol	Min.	Typ	Max	Units
Nominal Frequency ¹	F _{NOM}		25.000		MHz
Mode		Fundamental, AT - Cut			
Operating Temperature Range	T _{OP}	-40/85			°C
Stability Over T _{OP} ²	F _{STAB}			±20	ppm
Frequency Tolerance ²	F _{TOL}			±15	ppm
Aging / 1st year at 25C				±3	ppm
Motional Capacitance			11		fF
Load Capacitance	C _L		10		pF
Shunt Capacitance	C _o			2.5	pF
ESR				50	ohms
Drive Level				300	uW
Insulation Resistance		500			MOhm
Storage Temperature	T _{STO}	-40		90	°C

Notes:

1. Referenced to the Frequency at 25 °C.
2. Frequency measured at 25 °C ± 3 °C and includes 2 IR reflows.

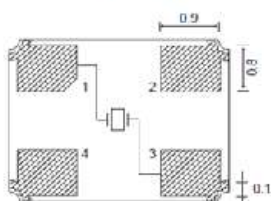
Product is compliant to RoHS directive and fully compatible with lead free assembly.
(Excluding solder dipped, _SNPB, option)



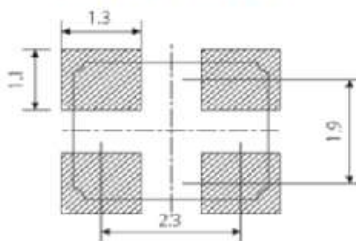
Package Drawing



BOTTOM VIEW



RECOMMENDED PAD LAYOUT



Marking

25M00

VYYMC

where

25M00 = Frequency, 25.000MHz

V = VECTRON

YY = Year (Ex 19: 2019)

M = Month (A: Jan, B: Feb, C: March...)

C = Manufacturing Location

All Dimensions in mm

Table 2. Environmental Compliance

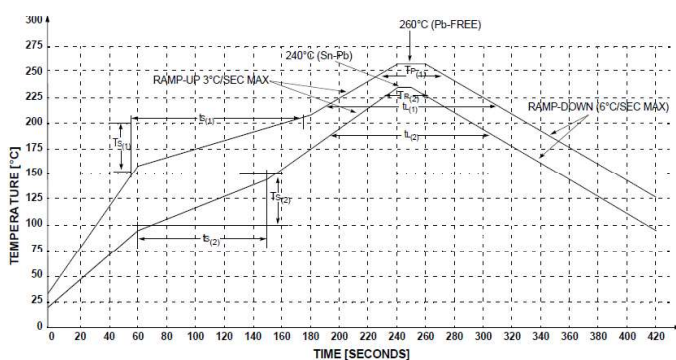
Parameter	Conditions
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Mechanical Vibration	MIL-STD-883, Method 2007, Condition A
Temperature Cycle	MIL-STD-883, Method 1010, Condition B
Solderability	MIL-STD-202-210, Condition B
Gross and Fine Leak	MIL-STD-883, Method 1014
Altitude	MIL-STD-883, Method 1001, Condition B
Moisture Sensitivity Level	MSL 1
Contact Pads	Gold (0.2 um min) over Nickel
Weight	20 mg

Reliability & IR Compliance

Suggested IR Profile

Devices are built using lead free epoxy and can be subjected to standard lead free IR reflow conditions shown in Table 3. Contact pads are gold over nickel and lower maximum temperatures can also be used, such as 220°C.

NOTE: Devices which have been solder dipped, _SNPB option, will not be Pb-Free.

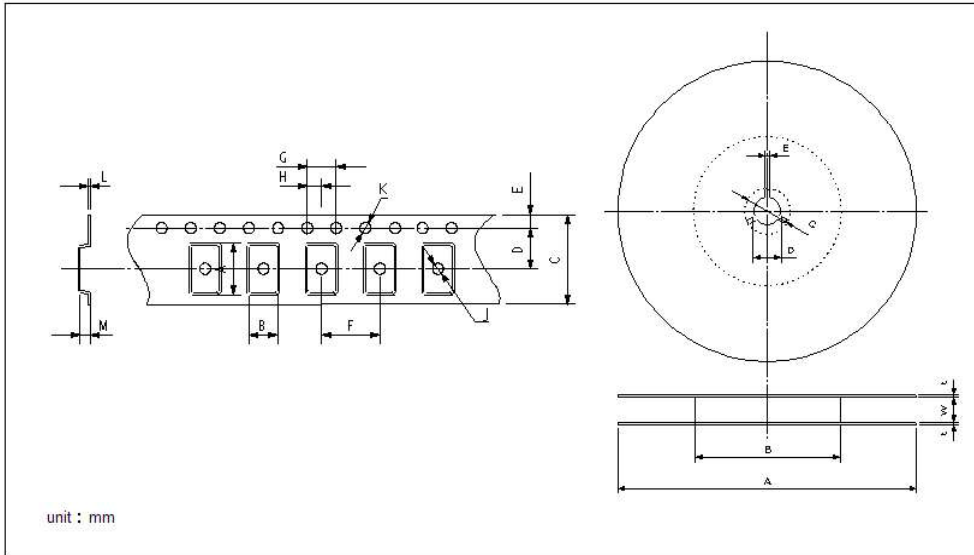
**Table 3. Reflow Profile**

Symbol	Min.	Max.	Units	Conditions
Ts ₍₁₎	150	200	°C	Pb-Free
Ts ₍₂₎	100	150	°C	_SNPB Option
ts ₍₁₎	60	240	Sec	Pb-Free
ts ₍₂₎	60	120	Sec	_SNPB Option
tl ₍₁₎	60	150	Sec	Pb-Free
tl ₍₂₎	60	150	Sec	_SNPB option
Tp ₍₁₎	245	260	°C	Pb-Free
Tp ₍₂₎	225	240	°C	_SNPB Option

Tape & Reel

Table 4. Tape and Reel Dimensions (mm)

Tape												Reel							
A	B	C	D	E	F	G	H	J	K	L	M	A	B	C	D	E	W	T	
3.6	2.9	8.0	3.5	1.75	4.0	4.0	2.0	0.5	1.55	0.25	1.0	180	60	21.0	13.0	2.0	9.0	2.0	



3K pieces per reel

Ordering Information

VXM7 - 9032 - 25M0000000xx

Product
3.2 x 2.5mm, Crystal

SCD

Packaging

TR: Tape and Reel
blank: Cut Tape / non TR quantities
_SNPB: Tin Lead Solder Dip

Frequency in MHz

Example:

VXM7-9032-25M0000000TR **Tape and Reel**
VXM7-9032-25M0000000 **Cut Tape**
VXM7-9032-25M0000000_SNPB **Tin Lead Solder Dipped**

Revision History

Revision Date	Approved	Description
Jan 29, 2020	FB	Initial release
April 09, 2025	FB	
Sept 25, 2025	FB	Update ESR from 60ohms to 50ohms



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