

# **SPECIFICATION SHEET**

# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

SPECIFICATION SHEET NO.	S0515 - XI26M00000S412			
ORIGINAL MFG/PART NO.	TGS Crystals/CM22 26M0A10-12-30-40-60 TLF			
NEXTGEN PART CODE	XI26M00000S412 Indicate This Code For RFQ /Order			
DATE	May 15, 2025			
REVISION	A2 Updated With Most Recent Data			
DESCRIPTION AND	MHz SMD Crystal Seam Seal, Case 2520 XI series, 4 pads			
MAIN PARAMETRICS	Dimension L2.50*W2.00*H0.55mm  26.000MHz, Tolerance ±10ppm, Load Capacitor 12pF  Frequency stability ±30ppm; ESR 60ohm Max.  Operating Temp. Range -40°C ~+85°C  Reflow Profile Condition 260 °C Max.  Package in Tape/Reel, 3000pcs/Reel  REACH/RoHS/RoHS III Compliant			
CUSTOMER				
CUSTOMER PART NUMBER				
CROSS REF. PART NUMBER				
MEMO				

## **VENDOR APPROVE**

Issued/Checked/Approved







Effective Date: May 15, 2025

## **CUSTOMER APPROVE**

Date:

5/15/2025

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## MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### MAIN FEATURE

- MHz SMD Crystal L2.50\*W2.00\*H0.55mm 4 Pads
- Low Cost
- · High Precision
- High Frequency Stability
- Short Lead time
- Reflow Profile Condition 260  $^{\circ}$  C Max.
- Cross More Competitors Part
- REACH/RoHS/RoHS III Compliant

#### **APPLICATION**

- Bluetooth, Wireless Communication Set
- Communication Electronics

#### **ELECTRICAL CHARACTERISTICS**

- See Page 6~7 For Different Part Code.
- All Products Parameters are Subject To NextGen Components' Final Confirmation.



Image shown is a representation only.

Exact specifications should be obtained from the product dimension.







# PART CODE: **XI26M00000S412**MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### **HOW TO ORDER**

Please Follow Up Part Code Guide And Indicate NextGen Part Code X126M00000S412 For RFQ and Order.

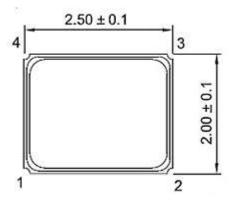
## PART CODE GUIDE



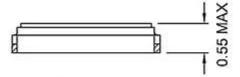
CODE	NAME	KEY SPECIFICATION OPTION			
XI	Product Series Code	MHz SMD Crystal, Seam Seal, 4 Pads Case Dimension L2.50*W2.00*H0.55mm			
26M0	Frequency Range Code	26M0: 26.0MHz or Specify Frequency Range			
0000S	Internal Control Code	Letter or Digits (A~Z, a~z or 0~9)			
412	Parameters Code	Letter or Digits (A~Z, a~z or 0~9)			
xx	Special/Custom Parameters Code	Letter or Digits (A~Z, a~z or 0~9) for Special Parametric; Blank: N/A			

# DIMENSION - Unit: mm, Case 2520

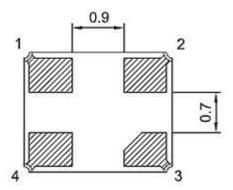
Top View



Side View



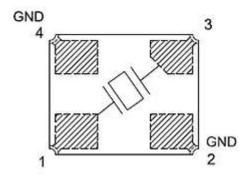
**Bottom View** 



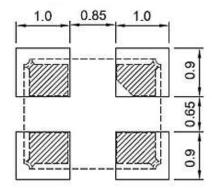
#1 Crystal #2 Ground #3 Crystal #4 Ground

# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### Connection



## Recommend Pad Layout





# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### GENERAL SPECIFICATION -Ta = 25°C

242444555	0,440.01	VALUE				CONDITION	
PARAMETER	SYMBOL	MIN.	TYPE	MAX.	UNIT		
Mode of Vibration Code		Fundamental					
Frequency Tolerance	△F/F0	±10	-	±50	ppm	@ 25°C	
Load Capacitance	CL	8	-	30	pF		
Frequency Stability	Тс	±10	-	±50	ppm		
Operating Temp. Range	TOPR	-40	-	+85	°C		
Storage Temp. Range	TSTG	-55	-	+125	°C		
Drive Level	DL	-	-	300	μW		
Insulation Resistance	IR	500	-		mΩ	@100V ± 15VDC	
Shunt Capacitance	CO	-	-	2.0	pF		
Aging per year	Fa	-3	-	+3	ppm	1st Year	



# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

## ELECTRICAL PARAMETERS - FOR DIFFERENT PART CODE- Ta = 25°C

FREQUENCY RANGE         FREQUENCY TOLERANCE         LOAD CAPACITANCE         FREQUENCY STABILITY         EQUIVALENT TEMPE. RANGE         EQUIVALENT SERIES RESISTANCE           XI12M000005408         12.000         ±10         8         ±30         -40 ~ +85         80           XI12M000005402         12.000         ±10         20         ±30         -40 ~ +85         150           XI12M28800S101         12.288         ±20         8         ±20         -20 ~ +70         150           XI12M1840S410         22.118         ±25         10         ±30         -40 ~ +85         80           XI24M000005408         24.000         ±10         8         ±30         -40 ~ +85         80           XI25M000005412         24.000         ±10         8         ±30         -40 ~ +85         60           XI25M000005408         25.000         ±10         8         ±30         -40 ~ +85         60           XI26M000005409         26.000         ±10         9         ±30         -40 ~ +85         60           XI27M120005412         27.120         ±10         12         ±30         -40 ~ +85         60           XI32M000005408         32.000         ±10         8         ±30							
XI12M000005408   12.000	PART CODE	RANGE	TOLERANCE	CAPACITANCE	STABILITY	TEMPE.	SERIES RESISTANCE
XI12M000005420       12.000       ±10       20       ±30       -40 ~ +85       150         XI12M288005101       12.288       ±20       8       ±20       -20 ~ +70       150         XI16M000005409       16.000       ±10       9       ±30       -40 ~ +85       150         XI22M118405410       22.118       ±25       10       ±30       -40 ~ +85       80         XI24M000005408       24.000       ±10       8       ±30       -40 ~ +85       60         XI25M000005412       24.000       ±10       12       ±30       -40 ~ +85       60         XI25M000005418       25.000       ±10       18       ±30       -40 ~ +85       60         XI26M000005412       26.000       ±10       9       ±30       -40 ~ +85       60         XI27M120005412       27.120       ±10       12       ±30       -40 ~ +85       60         XI32M000005408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M400005408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M000005412       40.000       ±10       8       ±30       -40 ~ +85       40 <td></td> <td>MHz</td> <td>ppm</td> <td>р⊦</td> <td>ppm</td> <td>***</td> <td>Ω Max.</td>		MHz	ppm	р⊦	ppm	***	Ω Max.
XI12M28800S101       12.288       ±20       8       ±20       -20~+70       150         XI16M00000S409       16.000       ±10       9       ±30       -40~+85       150         XI22M11840S410       22.118       ±25       10       ±30       -40~+85       80         XI24M00000S408       24.000       ±10       8       ±30       -40~+85       60         XI25M00000S412       24.000       ±10       12       ±30       -40~+85       60         XI25M00000S408       25.000       ±10       8       ±30       -40~+85       60         XI25M00000S418       25.000       ±10       18       ±30       -40~+85       60         XI26M00000S409       26.000       ±10       9       ±30       -40~+85       60         XI27M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M0000S412       40.000       ±10       8       ±30       -40~+85       40         XI40M0	XI12M00000S408	12.000	±10	8	±30	-40 ~ +85	80
XI16M000005409       16.000       ±10       9       ±30       -40 ~ +85       150         XI22M118405410       22.118       ±25       10       ±30       -40 ~ +85       80         XI24M000005408       24.000       ±10       8       ±30       -40 ~ +85       60         XI25M000005412       24.000       ±10       12       ±30       -40 ~ +85       60         XI25M000005408       25.000       ±10       18       ±30       -40 ~ +85       60         XI26M000005418       25.000       ±10       9       ±30       -40 ~ +85       60         XI26M000005409       26.000       ±10       12       ±30       -40 ~ +85       60         XI27M120005412       27.120       ±10       12       ±30       -40 ~ +85       60         XI32M000005408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M400005408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M000005412       40.000       ±10       8       ±30       -40 ~ +85       40	XI12M00000S420	12.000	±10	20	±30	-40 ~ +85	150
XI22M11840S410       22.118       ±25       10       ±30       -40 ~ +85       80         XI24M00000S408       24.000       ±10       8       ±30       -40 ~ +85       80         XI24M00000S412       24.000       ±10       12       ±30       -40 ~ +85       60         XI25M00000S408       25.000       ±10       8       ±30       -40 ~ +85       60         XI25M00000S418       25.000       ±10       18       ±30       -40 ~ +85       60         XI26M0000S409       26.000       ±10       9       ±30       -40 ~ +85       60         XI27M12000S412       27.120       ±10       12       ±30       -40 ~ +85       60         XI32M0000S408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M40000S408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M00000S408       40.000       ±10       8       ±30       -40 ~ +85       40         XI40M00000S412       40.000       ±10       12       ±30       -40 ~ +85       40	XI12M28800S101	12.288	±20	8	±20	-20 ~ +70	150
XI24M00000S408       24.000       ±10       8       ±30       -40~+85       80         XI24M00000S412       24.000       ±10       12       ±30       -40~+85       60         XI25M00000S408       25.000       ±10       8       ±30       -40~+85       60         XI25M00000S418       25.000       ±10       18       ±30       -40~+85       60         XI26M00000S409       26.000       ±10       9       ±30       -40~+85       60         XI26M00000S412       26.000       ±10       12       ±30       -40~+85       60         XI32M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M00000S408       40.000       ±10       8       ±30       -40~+85       40         XI40M00000S412       40.000       ±10       12       ±30       -40~+85       40	XI16M00000S409	16.000	±10	9	±30	-40 ~ +85	150
XI24M00000S412       24.000       ±10       12       ±30       -40~+85       60         XI25M00000S408       25.000       ±10       8       ±30       -40~+85       60         XI25M00000S418       25.000       ±10       18       ±30       -40~+85       60         XI26M00000S409       26.000       ±10       9       ±30       -40~+85       60         XI26M00000S412       26.000       ±10       12       ±30       -40~+85       60         XI27M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M00000S408       40.000       ±10       8       ±30       -40~+85       40         XI40M00000S412       40.000       ±10       12       ±30       -40~+85       40	XI22M11840S410	22.118	±25	10	±30	-40 ~ +85	80
XI25M00000S408       25.000       ±10       8       ±30       -40 ~ +85       60         XI25M00000S418       25.000       ±10       18       ±30       -40 ~ +85       60         XI26M00000S409       26.000       ±10       9       ±30       -40 ~ +85       60         XI26M00000S412       26.000       ±10       12       ±30       -40 ~ +85       60         XI27M12000S412       27.120       ±10       12       ±30       -40 ~ +85       60         XI32M00000S408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M40000S408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M00000S408       40.000       ±10       8       ±30       -40 ~ +85       40         XI40M00000S412       40.000       ±10       12       ±30       -40 ~ +85       40	XI24M00000S408	24.000	±10	8	±30	-40 ~ +85	80
XI25M00000S418       25.000       ±10       18       ±30       -40~+85       60         XI26M00000S409       26.000       ±10       9       ±30       -40~+85       60         XI26M00000S412       26.000       ±10       12       ±30       -40~+85       60         XI27M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M0000S408       40.000       ±10       8       ±30       -40~+85       40         XI40M0000S412       40.000       ±10       12       ±30       -40~+85       40	XI24M00000S412	24.000	±10	12	±30	-40 ~ +85	60
XI26M00000S409       26.000       ±10       9       ±30       -40~+85       60         XI26M00000S412       26.000       ±10       12       ±30       -40~+85       60         XI27M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M00000S408       40.000       ±10       8       ±30       -40~+85       40         XI40M00000S412       40.000       ±10       12       ±30       -40~+85       40	XI25M00000S408	25.000	±10	8	±30	-40 ~ +85	60
XI26M00000S412       26.000       ±10       12       ±30       -40~+85       60         XI27M12000S412       27.120       ±10       12       ±30       -40~+85       60         XI32M00000S408       32.000       ±10       8       ±30       -40~+85       60         XI38M40000S408       38.400       ±10       8       ±30       -40~+85       40         XI40M00000S408       40.000       ±10       8       ±30       -40~+85       40         XI40M00000S412       40.000       ±10       12       ±30       -40~+85       40	XI25M00000S418	25.000	±10	18	±30	-40 ~ +85	60
XI27M12000S412       27.120       ±10       12       ±30       -40 ~ +85       60         XI32M00000S408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M40000S408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M00000S408       40.000       ±10       8       ±30       -40 ~ +85       40         XI40M00000S412       40.000       ±10       12       ±30       -40 ~ +85       40	XI26M00000S409	26.000	±10	9	±30	-40 ~ +85	60
XI32M00000S408       32.000       ±10       8       ±30       -40 ~ +85       60         XI38M40000S408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M00000S408       40.000       ±10       8       ±30       -40 ~ +85       40         XI40M00000S412       40.000       ±10       12       ±30       -40 ~ +85       40	XI26M00000S412	26.000	±10	12	±30	-40 ~ +85	60
XI38M40000S408       38.400       ±10       8       ±30       -40 ~ +85       40         XI40M00000S408       40.000       ±10       8       ±30       -40 ~ +85       40         XI40M00000S412       40.000       ±10       12       ±30       -40 ~ +85       40	XI27M12000S412	27.120	±10	12	±30	-40 ~ +85	60
XI40M00000S408     40.000     ±10     8     ±30     -40 ~ +85     40       XI40M00000S412     40.000     ±10     12     ±30     -40 ~ +85     40	XI32M00000S408	32.000	±10	8	±30	-40 ~ +85	60
XI40M00000S412 40.000 ±10 12 ±30 -40~+85 40	XI38M40000S408	38.400	±10	8	±30	-40 ~ +85	40
	XI40M00000S408	40.000	±10	8	±30	-40 ~ +85	40
XI52M00000S410 52.000 ±10 10 ±30 -40~+85 60	XI40M00000S412	40.000	±10	12	±30	-40 ~ +85	40
	XI52M00000S410	52.000	±10	10	±30	-40 ~ +85	60

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# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### **RELIABILITY - MECHANICAL AND ENVIRONMENTAL ENDURANCE**

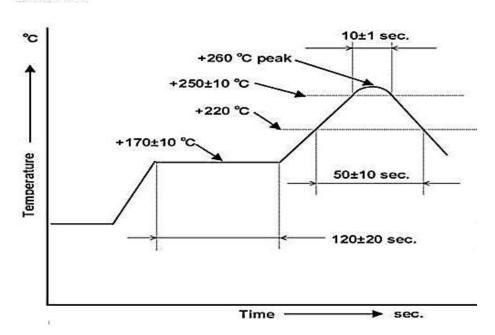
TEST ITEMS	TEST METHOD AND CONDITIONS	REQUIREMENTS	
Drop			
	times. (Board is thickness more than 30mm.)	≤5ppm	
		Rr as specification	
Shake	Shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm,	Frequency change:	
	direction x/y/z, all 30 minutes, test after 1 hours.	≤5ppm	
		Rr as specification	
Airproof	Put crystal into the pressure cabin with alcohol, keep pressure	IR≥500MΩ	
	0.4~0.5mpa 10 minutes, then take out and blow for 5 minutes		
Weld	Temperature: 260±5°C	90% exhibit tin ok	
	Time: 3 seconds		
Humidity	Temperature: +40±2°C	Frequency change:	
	Humidity: 90%~95% R.H.	≤5ppm	
	Time: 250 hours	Rr as specification	
Low temperature	Temperature: -30±2°C	Frequency change:	
	Time: 250 hours	≤5ppm	
	put in room temperature, test after 1 hours.	Rr as specification	
High	Temperature: +85±2°C	Frequency change:	
Temperature	Time: 250 hours	≤5ppm	
	put in room temperature, test after 1 hours.	Rr as specification	
Temperature	-30±3°C/30±3 min~+85±2°C/30±3min, 5 cycles	Frequency change:	
cycling		≤5ppm	
		Rr as specification	



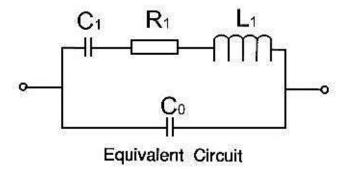
# MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### SUGGESTED REFLOW PROFILE - FOR REFERENCE ONLY

## Condition:

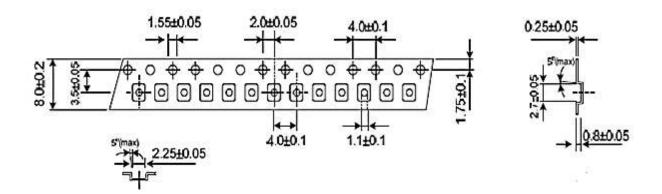


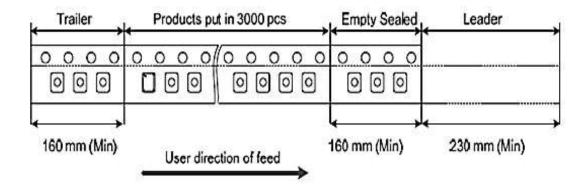
# **EQUIVALENT CIRCUIT**

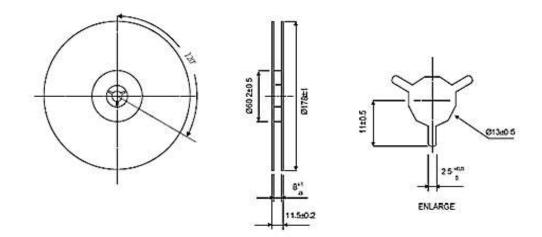


## MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

## TAPE AND REEL - Unit: mm, 3000pcs/Reel







## MHZ SMD CRYSTAL SEAM SEAL CASE 2520 XI SERIES

#### IMPORTANT NOTES AND DISCLAIMER

- ROHS COMPLIANCE: The levels of RoHS restricted materials in this product are below the maximum
  concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an
  exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for
  this product can be obtained can be obtained at Download Center.
- REACH COMPLIANCE: REACH substances of high concern (SVHCs) information is available for this product.
   Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
- All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test
  conditions, unless otherwise noted. Product performance may not be indicated by the Electrical
  Characteristics if operated under different conditions.
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- 8. NextGen requires that customers first obtain an RMA (Returned Merchandise Authorization) number prior to returning any products. Returns must be made within 30 days of the date of invoice, be in the original packaging, unused and like-new condition. At the time of quoting or purchasing, a product may say that it is Non-Cancelable/ Non-Returnable (NCNR). These products are not returnable and not refundable.

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