

GSC45M Series

MHz Quartz Crystal Unit

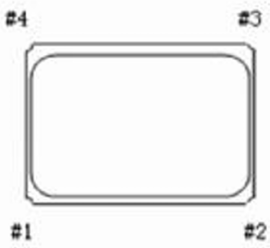
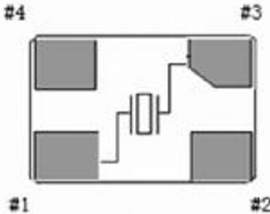
Description

The series is Crystal Unit with Nominal Frequency 12.000 MHz

Mechanical Data

- 2520 Package
- Seam Sealing
- RoHS Compliant and Halogen Free

Packages & Pin Assignments

2025		Equivalent Circuit	
		 Top View	
Pin	Description	Pin	Description
1 & 3	Connect Quartz Element	2 & 4	Connect to the cover

Ordering and Marking Information

Ordering Information						
Part Number	F	F _T	C _L	ESR	Marking	Reel
	MHz	ppm	pF	Ω		PCS
GSC45M1210F-18180	12.000	±10	18	180	EC□□□ 12000	3,000
■ Marking □□□ for GS Code						

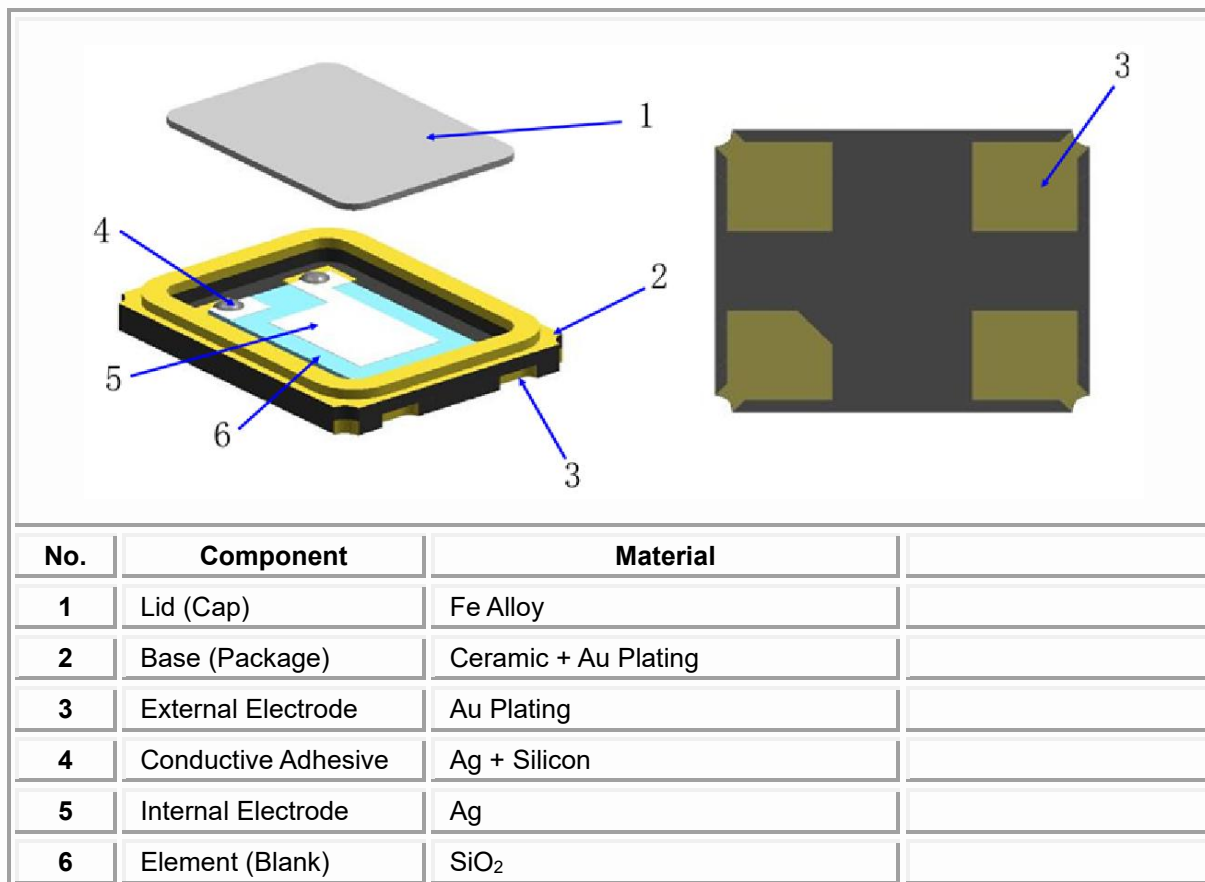
Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Description	Min	Typ	Max	Unit	Note
F	Nominal Frequency		12.000		MHz	
F_T	Frequency Tolerance		±10		ppm	@ 25±3°C
	Temperature Drift		±20		ppm	-40°C~+85°C
	Aging		±2		ppm	Year
C_L	Load Capacitance		18		pF	
ESR	Equivalent Series Resistance			180	Ω	
D_L	Drive Level	0.01		100	μW	
C₀	Shunt Capacitance			3	pF	
R_{INS}	Insulation Resistance	500			MΩ	@ DC100V
T_{OPR}	Operation Temperature	-40		85	°C	
T_{STG}	Storage Temperature	-55		125	°C	
	Crystal Cut Type	AT CUT (thickness shear mode)				
	Oscillation Mode	Fundamental				

NOTE:

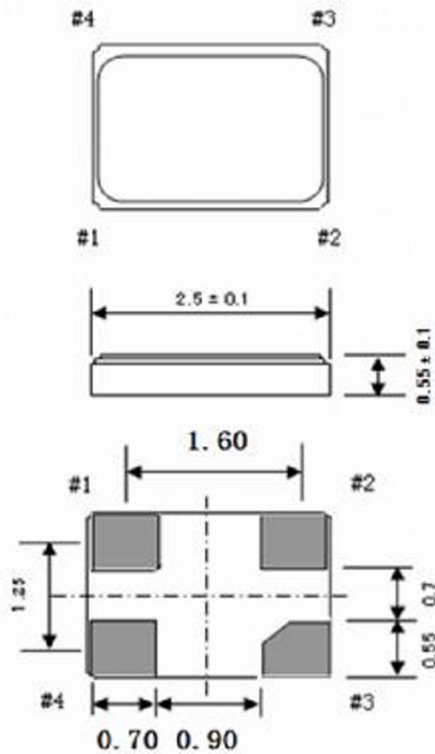
Electrical characteristics measured by S&A250B or equivalent

Internal Structure

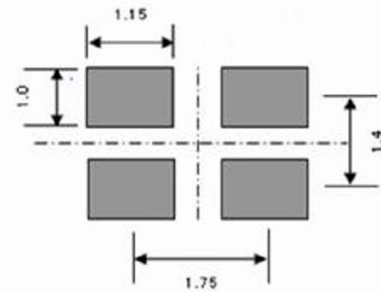


2025

Package Dimension



Recommended Land Pattern



Unit:mm

NOTE:

Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

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