



PAD	CONNECTION
1	Crystal
2	Ground & lid
3	Crystal
4	Ground & lid

Scale 2:1

Features

- ▶ **Metal lid can be grounded to minimise EMI**
- ▶ **Seam seal for excellent long-term stability**
- ▶ **Fundamental mode up to 45.0MHz**
- ▶ **Tight specifications available**

Standard Frequencies

Fundamental in MHz			
10.000000	16.000000	24.000000	32.000000
11.059200	16.000312	24.000140	33.868800
12.000000	16.588800	24.576000	35.251200
14.318180	18.432000	25.000000	36.000000
14.745600	19.660800	29.491200	40.000000
15.000000	20.000000	30.000000	

Temperature Stability

The table shows available combinations of stability (in ppm) and temperature range.

	±20	±15	±10	±7.5	±5
0 to +50°C	•	•	•	•	•
-10 to +60°C	•	•	•	•	•
-20 to +70°C	•	•	•	•	-
-30 to +80°C	•	•	-	-	-
-40 to +85°C	•	-	-	-	-

Specifications

Parameters	Product	Option Codes
	GSX-641	
Frequency range: 9.20 ~ 45.0MHz	■	
Calibration tolerance:		
±5ppm	□	L
±7.5ppm	□	M
±10ppm	■	1
±20ppm	□	2
Other values	□	specify
Temperature stability:		
±5ppm	□	L
±7.5ppm	□	M
±10ppm	■	1
±15ppm	□	P
±20ppm	□	2
Other values	□	specify
Operating temperature range:		
0 to +50°C	□	0
-10 to +60°C	■	1
-20 to +70°C	□	2
-30 to +80°C	□	3
-40 to +85°C	□	4
Other values	□	specify
Circuit condition:		
10pF	□	A
12pF	□	B
16pF	■	D
18pF	□	E
20pF	□	F
30pF	□	J
Other values	□	specify
Oscillation mode: Fundamental	■	F
Static capacitance (C₀): 7pF max	■	
Equivalent series resistance (max):		
50Ω (9.20 ~ 11.9MHz)	■	
40Ω (12.0 ~ 24.9MHz)	■	
30Ω (25.0 ~ 45.0MHz)	■	
Ageing:		
±3ppm max first year	■	
±1ppm max first year	□	specify
Test drive level: 100μW	■	
Soldering condition: 260°C, 10 sec x2 max	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Product name + option codes + frequency

eg: **GSX-641/111DF 16.0MHz** 10/10/10/16-F

GSX-641/LM1BF 36.0MHz 05/7.5/10/12-F

Option code X (eg GSX-641/X) denotes a custom specification.

- ◆ Available on T&R - 1k pcs per reel.
- ◆ Refer to our website for T&R and soldering details.