



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

Scale 3:1

## Features

- ▶ **Metal lid can be grounded to minimise EMI**
- ▶ **Seam seal for excellent long-term stability**
- ▶ **Tight specifications available**
- ▶ **Ultra-miniature for maximum space saving**

## Standard Frequencies

Frequencies in MHz			
12.600000	13.000000	19.200000	20.657500
12.800000	14.400000	19.680000	20.945000

Other frequencies available. Please consult our sales office.

## Temperature Stability

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

	±30	±20	±15	±10	±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-531	
Frequency range: 10.0 ~ 50.0MHz	■	
Calibration tolerance:		
±5ppm	□	L
±10ppm	■	1
±20ppm	□	2
±30ppm	□	3
Other values	□	specify
Temperature stability:		
±5ppm	□	L
±10ppm	■	1
±15ppm	□	P
±20ppm	□	2
±30ppm	□	3
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
Storage temperature range:		
-40 to +90°C	■	
Circuit condition:		
9pF	□	N
12pF	□	B
16pF	■	D
20pF	□	F
30pF	□	J
Other values	□	specify
Oscillation mode: Fundamental	■	F
Static capacitance (C <sub>0</sub> ): 7pF max	■	
Equivalent series resistance:		
60Ω (10.0 ~ 10.9MHz)	■	
50Ω (11.0 ~ 11.9MHz)	■	
40Ω (12.0 ~ 24.9MHz)	■	
30Ω (25.0 ~ 50.0MHz, fund)	■	
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-531/111DF 12.80MHz** 10/10/10/16-F

**GSX-531/LP2JF 24.5760MHz** 05/15/20/30-F

Option code X (eg GSX-531/X) denotes a custom specification.

- ◆ Available on T&R - 3k pcs per reel.
- ◆ Refer to our website for T&R and soldering details.