

### 3. Constant temperature control type



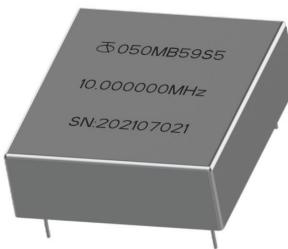
#### 3-9.O50M Dual Thermostat Tank Type

O50M

Vibration Resistance Index: ★★

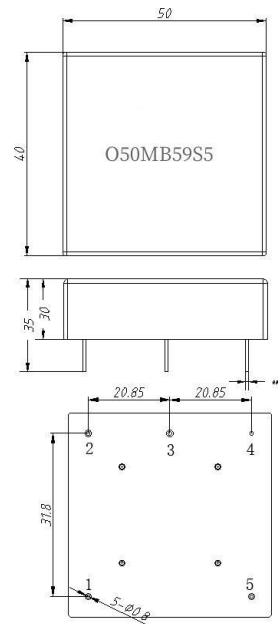
Vibration type: general products

Features: ultra-low frequency temperature coefficient is suitable for power communication, frequency synthesis, test devices.



Item	Term	Nominal value	Unit
Nominal frequency	25°C, Vcc=12V	10	MHz
Initial deviation	25°C, Vc=Vco	±0.01	ppm
Output			
Waveform	25°C, Vcc=12V	simple harmonic vibration	
Level	25°C, Vcc=12V	8~10	dBm
Load	25°C, Vcc=12V	50	Ohm
Harmonics	25°C, Vcc=5V	-40	dBc
Frequency Control			
Input Impedance	25°C, Vcc=12V	50	kΩ
Slope	25°C, Vcc=12V	≤10	% (positive slope)
Frequency pull range	Vc=0V	-0.35	ppm
	Vc=Vco	0	ppm
	Vc=Vref	0.35	ppm
Power supply			
Input voltage	Vcc	12.0	V
Starting current	Vcc=12V	700	mA
Stable current	25°C, Vcc=12V	250	mA
Activation time	10ppb@25°C	600	sec
Phase noise			
Static unilateral phase noise	10Hz	-120/-125	dBc/Hz
	100Hz	-145/-150	
	1kHz	-155/-160	
	10kHz	-160/-165	
Frequency stability			
Frequency vs Temperature	25°C	0.005	ppm
Frequency vs. supply voltage	25°C	1	ppb
Days aging rate	30 days after energization	0.5	ppb
Annual aging rate		0.05	ppm

#### Overall dimensions



#### Pin Definitions

- 1 Power Supply
- 2 Vref
- 3 Voltage Control Input
- 4 Ground
- 5 RF Output

Temperature Range		Frequency Temperature Stability	
Code	Description	Code	Description
A	0 °C ~50 °C	17	1×10 <sup>-7</sup>
B	-10 °C ~60 °C	58	5×10 <sup>-8</sup>
C	-20 °C -70 °C	18	1×10 <sup>-8</sup>
D	-40 °C -70 °C	59	5×10 <sup>-9</sup>
E	-40 °C -85 °C	19	1×10 <sup>-9</sup>
F	-55 °C -85 °C	YZ	Y×10 <sup>-2</sup>

#### Limit parameters

Supply Voltage	-0.5~13.0V	Humidity	95%
Control Voltage	-1.0~9.0V	vibration shock	GJB360 Related Specifications
Storage Temp. Range	-60 °C ~ +90 °C	master standard	GJB1648-1993