



FEATURE

The SMK5242OCAI belongs to a range of super single oven OCXOs designed as a compact and smart frequency source and time keeping reference for all synchronization systems, including precision positioning system bases equipment.

Applications

Stratum 2 timing modules

Time and frequency references

Wireless Base Stations (GSM,UMTS, CDMA, LTE)

Instrumentation and Broadcasting

52*42*14 mm



Specification for electrical appliances

| Parameter | 5.0V | | 3.3V | | Unit |
|---------------------------------|---------------|------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| Supply Voltage(VDD) 5% | 4.75 | 5.25 | 3.135 | 3.465 | V |
| Frequency Range | 5 | 15 | 5 | 15 | MHz |
| Standard Frequency | 10 12.8 13 15 | | | | |
| Frequency Tolerance* | ±0.2 | | ±0.2 | | ppb |
| Vs Load (±10%) change | ±10 | | ±10 | | ppb |
| Vs Aging | ±10 | | ±10 | | |
| Power consumption | 8 | | 8 | | W |
| | 3.5 | | 3.5 | | W |
| Output Level (CMOS) | | | | | |
| Output voltage level high (VOH) | 2.4 | | 2.4 | | V |
| Output voltage level low (VOL) | 0.4 | | 0.4 | | |
| Rise & fall time | 5 | | 5 | | ns |
| Vc Input Impedance | 100 | | 100 | | KΩ |
| Operating temperature range | -40 | 85 | -40 | 85 | °C |



10.00Mhz SMK5242OCAI ocxo ssp phase noise

| Phase Noise | | Unit |
|-------------|------|--------|
| 10Hz | -140 | dBc/Hz |
| 100Hz | -155 | |
| 1KHz | -160 | |
| 10KHz | -165 | |

Environmental Parameters

Storage Temperature Range: -55 to 90°C

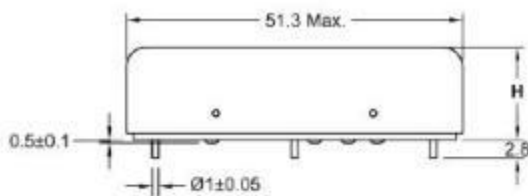
Frequency stability over temperature in still air

Shock: IEC 60068-2-27, Test Ea: 1500G acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes

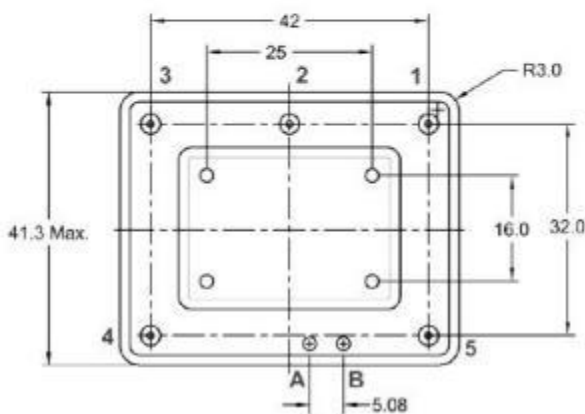
Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz, 1.5mm displacement, 60-2000Hz at 98.1m/s², 30mins in 3 mutually perpendicular planes at 1 oct/min

Solderability: MIL-STD-202, Method 208, Category 3

DIMENSION (mm)



FRONT VIEW



BOTTOM VIEW

HEIGHT (H) OPTIONS:

H = 14 mm, or
 H = 19 mm.

NOTE:

Outline unit is mm.
 Tolerance is ± 0.2mm if it has not been indicated.

PIN CONNECTIONS

- 1 GND
- 2 Vc (Frequency Control)
- 3 VREF (Reference Voltage)
- 4 Vcc (Power Supply)
- 5 Output (Output Signal)
- A Do Not Connect (For Internal Use)
- B Do Not Connect (For Internal Use)