

OCXO Oven controlled Crystal Oscillators 恒温晶振

一、应用

通讯、航空、航天、军事、移动通信、数字程控交换机、网络传输、接入网、光传输、雷达、导航、电子对抗、无线通信、测试设备、锁相环电路 SDH、SONET、ATM、WLL、PCS 基站、蜂窝基站、频率合成器

二、主要技术指标

1) Frequency Range 频率范围: 1.00-160.00MHz

2) SC Cut OCXO AT Cut OCXO

3) Initial Calibration 频率准确度: A $\leq \pm 0.5\text{ppm}$ @25°C B $\leq \pm 0.1\text{ppm}$ @25°C
C $\leq \pm 0.05\text{ppm}$ @25°C D $\leq \pm 0.01\text{ppm}$ @25°C

4) Frequency Adjustment 频率调整: 1 $\geq \pm 0.5\text{ppm}$ 2 $\geq \pm 1.0\text{ppm}$ 3 $\geq \pm 3.0\text{ppm}$
4 $\geq \pm 5.0\text{ppm}$ 5 $\geq \pm 7.0\text{ppm}$ 6 $\geq \pm 10\text{ppm}$

5) Control Voltage 压控电压: 0 - 5V

6) Operating Temperature 工作温度范围: E 0-+50°C F -10-+60°C G -20-+70°C
H -30-+75°C I -40-+75°C J -40-+85°C

7) Frequency Stability 温度频率稳定度: 1 ppb = ppm 1/1000

K $\pm 0.1\text{ppm}$ L $\pm 0.05\text{ppm}$ M $\pm 0.03\text{ppm}$ N $\pm 0.02\text{ppm}$
O $\pm 0.01\text{ppm}$ P $\pm 0.03\text{ppm}$ Q $\pm 0.005\text{ppm}$ R $\pm 0.001\text{ppm}$

8) Output Waveform 输出波形: 1 HCMOS 2 TTL 3 AC MOS
4 Sine 输出电平 $\geq +2\text{dBm}$ $\geq +5\text{dBm}$ @ 50Ω
谐波抑制 $\leq -20\text{dBc}$ $\leq -30\text{dBc}$ @ 50Ω
杂波抑制 $\leq -70\text{dBc}$ $\leq -75\text{dBc}$ @ 50Ω
5 Clipped Sine $\geq 1\text{Vp-p}$ 10kΩ//10pF

9) Supply Voltage 工作电压范围: S 3.3V T 5.0V U 12.0V W 15.0V

10) Power Consumption 功耗: Warm up 开机 $\leq 3.5\text{W}-7.0\text{W}$
@25°C 稳定 $\leq 1.2\text{W}-3.5\text{W}$

11) Phase Noise 相位噪声:

Frequency	10Hz	100Hz	1kHz	10kHz	100kHz
10.0MHz	-1120dBc/Hz	-150dBc/Hz	-160dBc/Hz	-165dBc/Hz	-170dBc/Hz
10.0MHz	-120dBc/Hz	-140dBc/Hz	-150dBc/Hz	-155dBc/Hz	-160dBc/Hz
10.0MHz	-115dBc/Hz	-135dBc/Hz	-145dBc/Hz	-150dBc/Hz	-155dBc/Hz
10.0MHz	-100dBc/Hz	-130dBc/Hz	-140dBc/Hz	-145dBc/Hz	-150dBc/Hz

12) Ageing 频率老化率: $\pm 0.1\text{ppm}$ maximum in first year $\pm 1.0\text{ppm}$ maximum for 10 years
 $\pm 0.5\text{ppm}$ maximum in first year $\pm 2.0\text{ppm}$ maximum for 10 years

13) Package Outline 封装、尺寸:

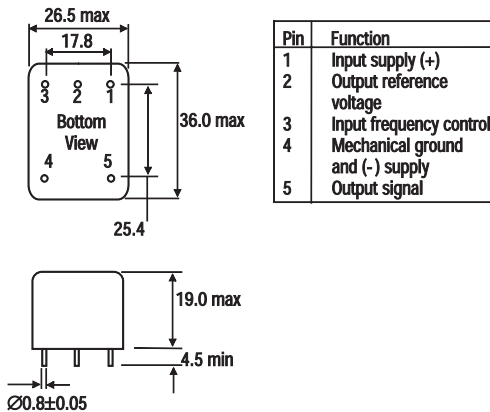
N DIP 21*13*12mm O DIP 20*20*10mm P DIP 25*19*15mm Q DIP 30*30*16mm
R DIP 36*27*16mm S DIP 38*38*16mm T DIP 50*50*16mm U SMD 25*22*14mm

14) Storage Temperature 储存温度范围: $-55\text{--}90^\circ\text{C}$

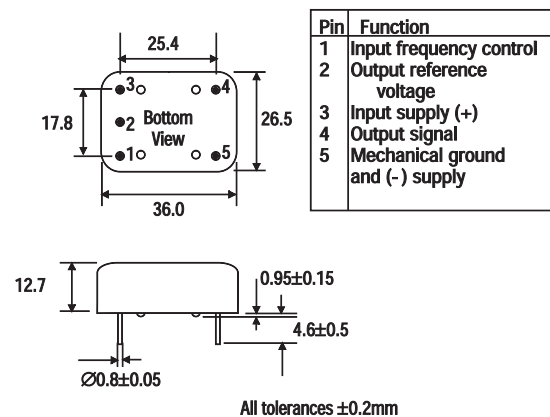
三、产品定型 RTO-10MHZ-SC A 1 J K 1 U N

	频率	晶体	准确度	频率调整	温度范围	稳定性	波形	电压	尺寸
RTO	10	SC	A	1	J	K	1	U	N
RTO	10MHZ	SC cut	$\pm 0.5\text{ppm}$	$\pm 0.5\text{ppm}$	$-40\text{--}+85^\circ\text{C}$	$\pm 0.1\text{ppm}$	HCMOS	12V	DIP 21*13*12 mm

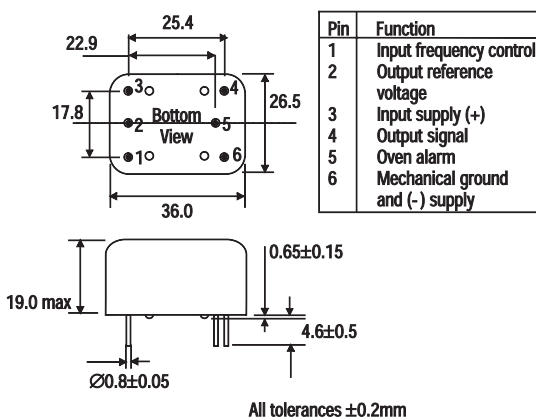
Outline in mm - (scale 1:2) - Package 36



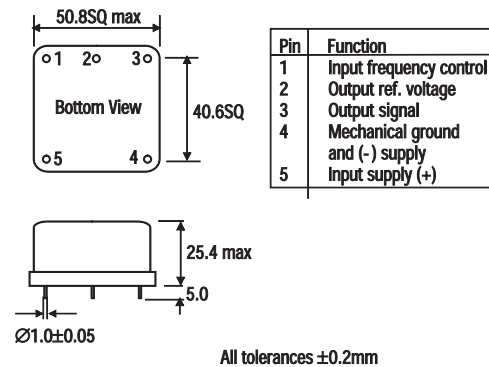
Outline in mm - (scale 1:2) - Package 36B



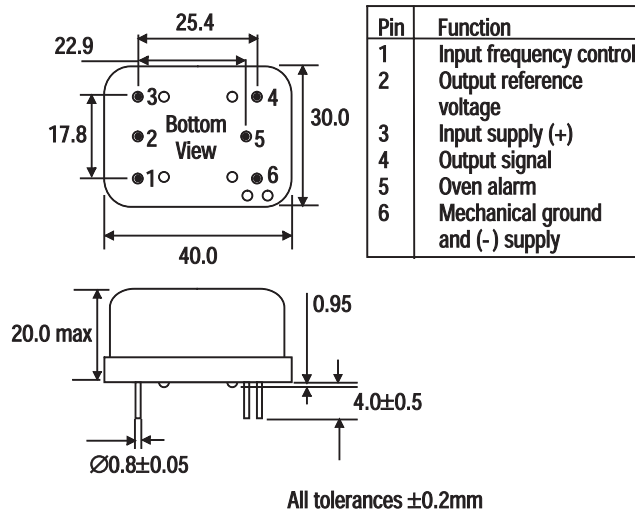
Outline in mm - (scale 1:3) - Package 36A



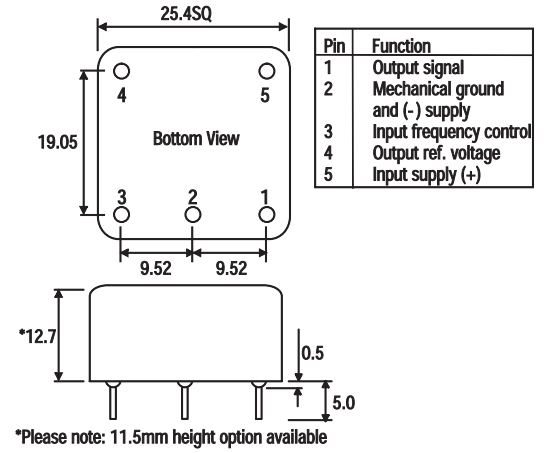
Outline in mm - (scale 1:3) - Package 50



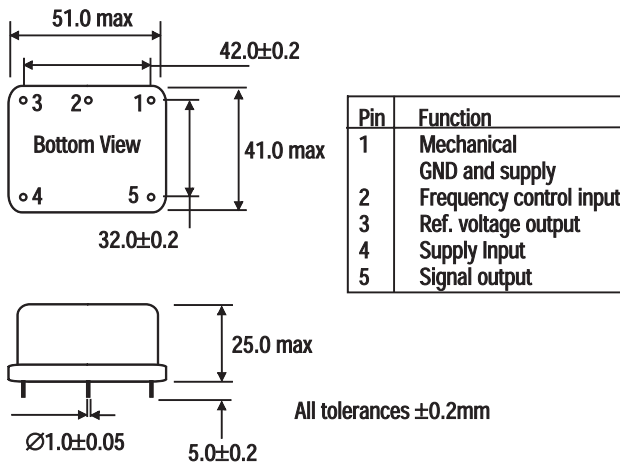
Outline in mm - (scale 1:3) - Package 40



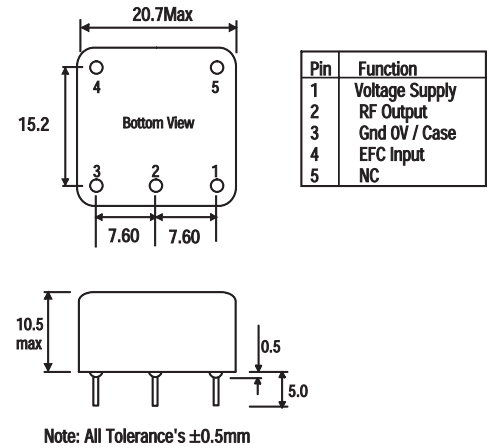
Outline in mm - Package 25



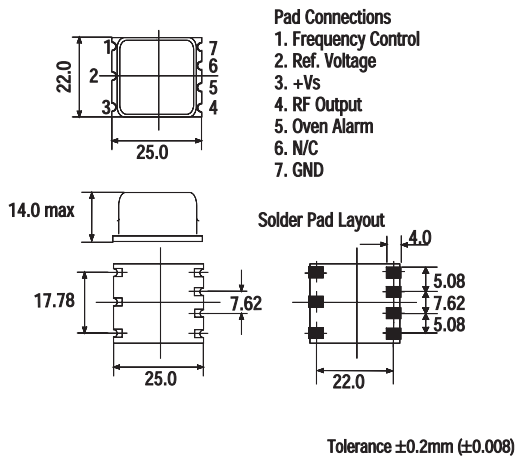
Outline in mm - (scale 1:3) - Package 51



Outline in mm - Package 20



Outline in mm - (scale 1:2) - Package 25AS



Outline in mm - (scale 1:2) - Package 25LP

