

AnaSem

# Crystal Oscillators

## VCXO/SMD Clock Oscillator

### 27.000MHz / $\pm 150$ ppm / AS27000VCC

### 特長

周波数可変範囲 :  $\pm 150$  ppm/ $V_c=1.65V \pm 1.65V$   
 周波数安定度 :  $\pm 30$  ppm/ $-20 \sim +70$  ,  $V_{dd}=3.3V \pm 5\%$   
 低消費電流 : 6 mA / 27 MHz / 3.3 V  
 動作電圧範囲 :  $3.3V \pm 5\%$   
 セラミックパッケージ (7×5×1.7mm)  
 出力デューティ : 45 ~ 55% / 25

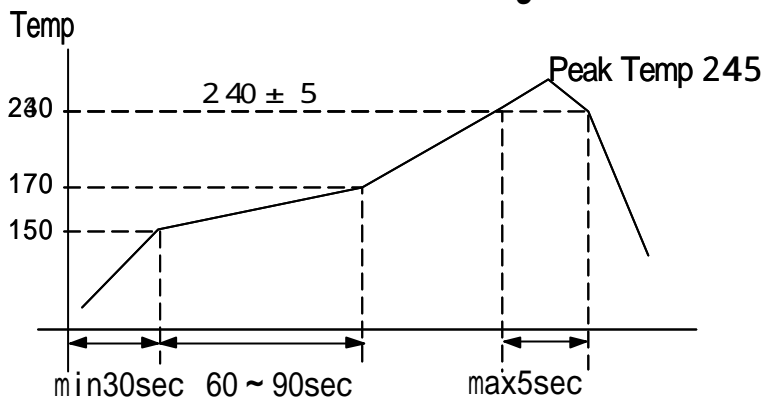
### Features

Frequency Deviation Range  
 Frequency Stability:  $\pm 30$  ppm  
 Low Power Consumption: 6 mA / 3.3 V  
 Operating Voltage:  $3.3V \pm 5\%$   
 Ceramic Package (7×5×1.7mm)  
 Output Duty: 45 ~ 55% / 25

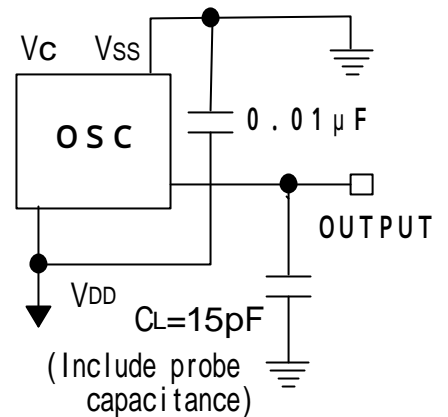
### 電気的特性 Specifications

項目 ITEM	型名 TYPE	AS27000VCC
Output Frequency 出力周波数		27.000 MHz
Frequency Deviation Range 周波数可変範囲		$\pm 150$ ppm min/ $V_c=1.65V \pm 1.65V$
Frequency Stability 周波数安定度		$\pm 30$ ppm min/ $-20 \sim +70$ / $3.3V \pm 5\%$ (Initial Deviation at 25 included, $V_c=1.65V$ , $V_{dd}=3.3V$ )
Frequency Stability/ Power Supply Voltage 電源電圧周波数変動		$\pm 2.0$ ppm max/ $3.3V \pm 5\%$ (Reference at 25 , $V_c=1.65V$ )
Frequency Tuning Voltage Range 公称周波数設定電圧偏差		$V_t=1.65 \pm 0.3V$ / $V_{DD}=3.3V$ / $25 \pm 2$
Operating Temperature Range 動作温度範囲		$-20 \sim +70$
Storage Temperature Range 保存温度範囲		$-40 \sim +85$
Power Supply Voltage 電源電圧		$+3.3V \pm 5\%$
Power Consumption (No Load) 消費電流 (無負荷)		typ: 6 mA / 3.3 V, max: 9 mA / 3.3 V
Output Symmetry 出力波形対称性		45% to 55% (at $1/2 V_{DD}$ ) / 3.3 V / 25
Rise Time / Fall Time 立ち上がり、立ち下がり時間		4.0 nS max (0.3~3.0 V) / 4.0 nS max (3.0~0.3 V)
Output Load 出力負荷		15 pF
Input Level 入力レベル		$V_{IH}: +3.0V$ min / $V_{IL}: +0.3V$ max
Output Level 出力レベル		$V_{OH}: +3.0V$ min / $V_{OL}: +0.3V$ max
Assembly Temperature Range 実装温度条件		Peak Temperature $240 \pm 5$ for 5 seconds max. Maximum Temperature: 245

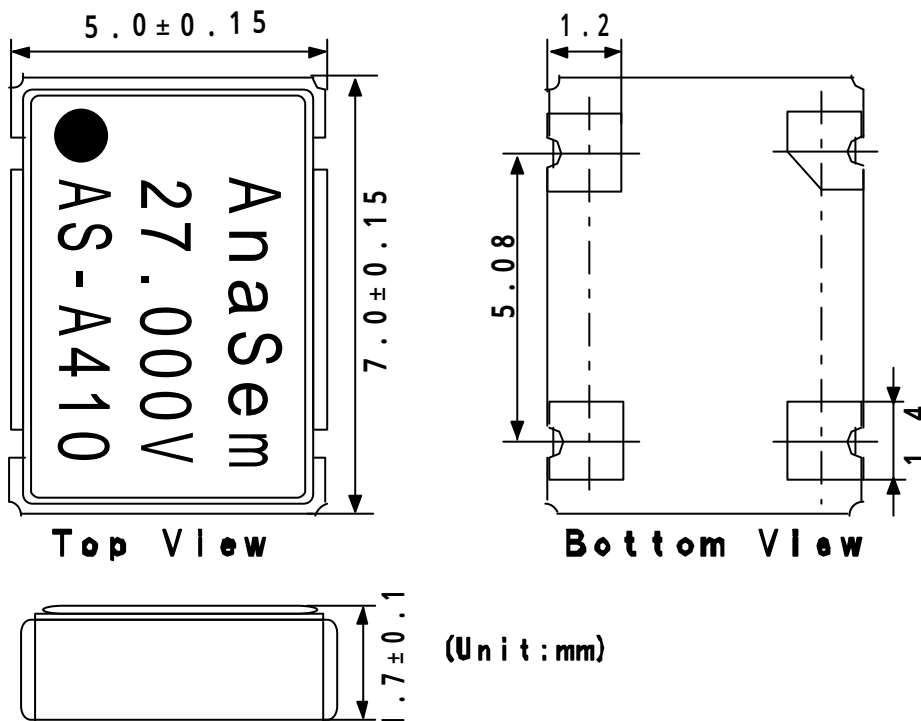
# 推奨半田付け条件 / Recommended Reflow Soldering Condition



# 測定回路 Measurement Circuit



# 外形寸法 Dimensions



# 接続端子 Pin Connections

## Pin Connections

	V <sub>c</sub>
	GND (V <sub>SS</sub> )
	OUTPUT
	+3.3V (V <sub>DD</sub> )

# マーキング Marking

**AS - A410**

↓     ↓     ↓  
a     b     c

a	Maker / ID: AS=AnaSem. InC
b	Product Version/A:A Version
c	Production Week&Year: 410/10th week/2004

**製造元: アナセム株式会社**

**Maker : Ana Sem Inc**

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