

AnaSem

# Crystal Oscillators

## VCXO/SMD Clock Oscillator

27.000MHz /  $\pm 110$ ppm / AS27000VCA

### 特長

周波数可変範囲 :  $\pm 110$ 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 : 7mA / 27MHz / 3.3V

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: 7mA / 3.3V

Operating Voltage:  $3.3V \pm 5\%$

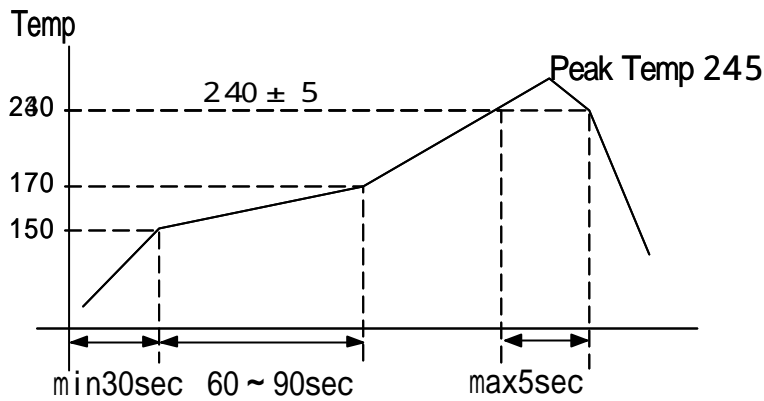
Ceramic Package (7×5×1.7mm)

Output Duty: 45 ~ 55% / 25

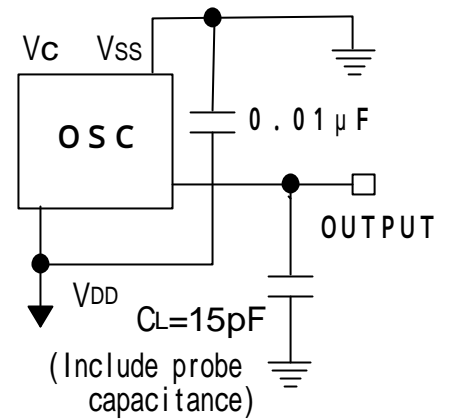
## 電気的特性 Specifications

項目 ITEM	型名 TYPE	AS27000VCA
Output Frequency 出力周波数		27.000MHz
Frequency Deviation Range 周波数可変範囲		$\pm 110$ 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		$\pm 3.0$ 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: 7mA / 3.3V, max: 9mA / 3.3V
Output Symmetry 出力波形対称性		45% to 55% (at $1/2V_{DD}$ ) / $3.3V$ / 25
Rise Time/Fall Time 立ち上がり、立ち下がり時間		4.0nS max (0.3~3.0V) / 4.0nS max (3.0~0.3V)
Output Load 出力負荷		15pF
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 5seconds max. Maximum Temperature: 245

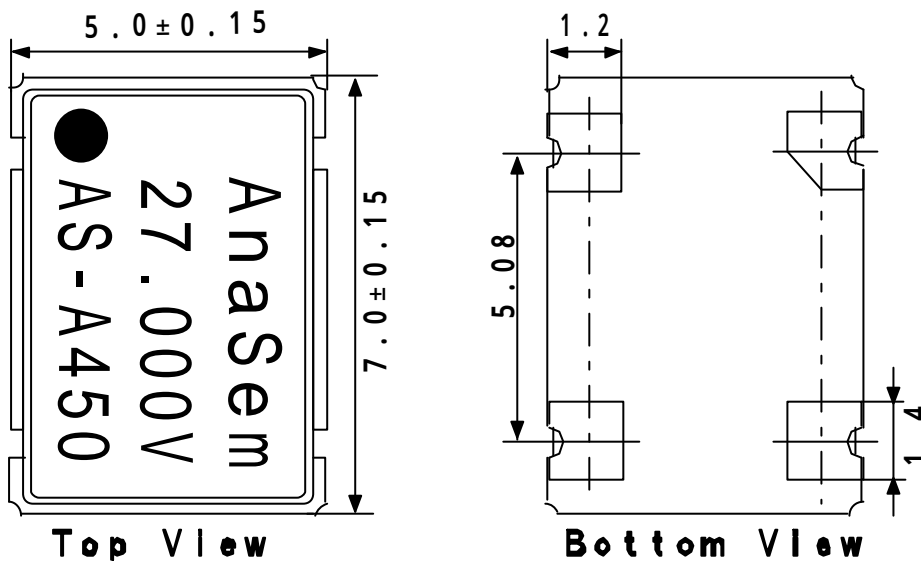
# 推奨半田付け条件 / Recommended Reflow Soldering Condition



# 測定回路 Measurement Circuit



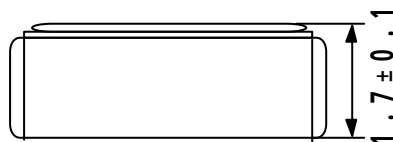
# 外形寸法 Dimensions



# 接続端子 Pin Connections

## Pin Connections

	Vc
	GND (Vss)
	OUTPUT
	+3.3V (VDD)



(Unit:mm)

# マーキング Marking

AS - A450

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a b c

a	Maker/ID:AS=AnaSem.InC
b	Product Version/A:A Version
c	Production Week&Year:450/50th week/2004

製造元: アナセム株式会社

Maker : Ana Sem Inc

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