

AnaSem

# Crystal Oscillators

## VCXO/SMD Clock Oscillator

### 60.750MHz / 3.3V / APR $\pm$ 70ppm / AS60750VDA

## 特長

周波数可変範囲 : APR $\pm$ 70ppm/Vc=1.65V $\pm$ 1.65V周波数安定度 :  $\pm$ 30ppm/-20~70 , Vdd=3.3V $\pm$ 5%

低消費電流 : 12mA / 60MHz / 3.3V

動作電圧範囲 : 3.3V $\pm$ 5%セラミックパッケージ (7 $\times$ 5 $\times$ 1.7mm)

出力デューティ : 45~55% / 25

## Features

Frequency Deviation Range

Frequency Stability:  $\pm$  30 ppm

Low Power Consumption: 12mA / 3.3V

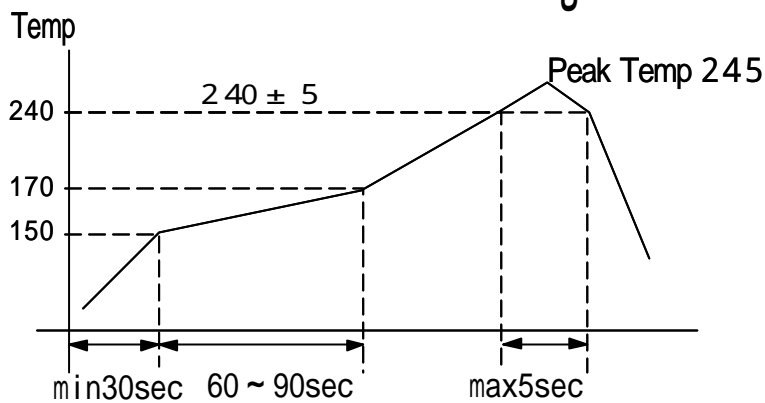
Operating Voltage: 3.3V $\pm$ 5%Ceramic Package (7 $\times$ 5 $\times$ 1.7mm)

Output Duty: 45~55% / 25

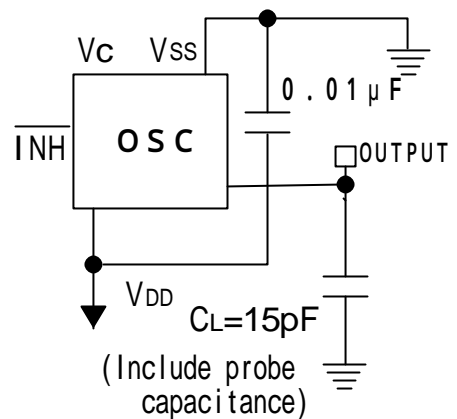
## 電気的特性 Specifications

項目 ITEM	型名 TYPE	AS60750VDA
Output Frequency 出力周波数		60.750MHz
Absolute Pulling Range(= Pullability- Stability) 絶対周波数可変範囲 (= 周波数可変幅 - 安定度)		$\pm$ 70ppm min/Vc=1.65V $\pm$ 1.65V
Frequency Stability 周波数安定度		$\pm$ 30ppm max/-20~+70 /3.3V $\pm$ 5%(Initial Deviation at 25 included, Vc=1.65V, Vdd=3.3V)
Frequency Stability/ Power Supply Voltage 電源電圧周波数変動		$\pm$ 9.0ppm max/3.3V $\pm$ 5% (Reference at 25 , Vc=1.65V)
Frequency Tuning Voltage Range 公称周波数設定電圧偏差		Vt=1.65 $\pm$ 0.16V / V <sub>DD</sub> =3.3V / 25 $\pm$ 2
Operating Temperature Range 動作温度範囲		-20~+70
Storage Temperature Range 保存温度範囲		-40~+85
Power Supply Voltage 電源電圧		+3.3V $\pm$ 5%
Power Consumption(No Load) 消費電流 (無負荷)		typ: 12mA / 3.3V, max: 15mA / 3.3V
Output Symmetry 出力波形対称性		45% to 55% (at 1/2V <sub>DD</sub> ) / 3.3V / 25
Rise Time/Fall Time 立ち上がり、立ち下がり時間		3.0nS max(0.3~3.0V) / 3.0nS max(3.0~0.3V)
Output Load 出力負荷		15 pF
Input Level 入力レベル		V <sub>IH</sub> : +3.0V min / V <sub>IL</sub> : +0.3V max
Output Level 出力レベル		V <sub>OH</sub> : +3.0V min / V <sub>OL</sub> : +0.3V max
Assembly Temperature Range 実装温度条件		Peak Temperature 240 $\pm$ 5 for 5seconds max. Maximum Temperature: 245

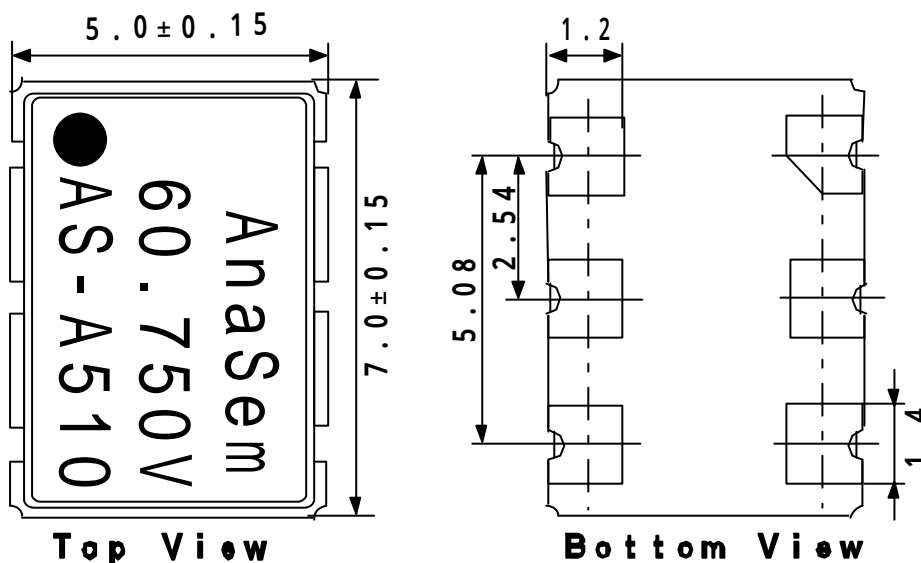
# 推奨半田付け条件 / Recommended Reflow Soldering Condition



# 測定回路 Measurement Circuit



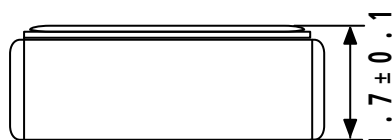
# 外形寸法 Dimensions



# 接続端子 Pin Connections

## Pin Connections

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



(Unit: mm)

/ INHIBIT	
"L" Level	Open or "H" Level
High Impedance	Enable: Output

# マーキング Marking

AS - A510

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a b c

a	Maker / ID: AS=AnaSem. InC
b	Product Version/A: A Version
c	Production Week&Year: 510/10th week/2005

製造元: アナセム株式会社

Maker : Ana Sem Inc

〒274-0825 船橋市前原西2丁目13-10

2-13-10 Maehara Nishi Funabashi Chiba Japan

TEL (047) 470-5810 FAX 470-5825

Home Page: <http://www.anasem.co.jp>

e-mail: [support@anasem.co.jp](mailto:support@anasem.co.jp)