

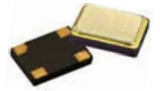
# 97050S Series

Clock oscillator, 7.0 x 5.0mm, HCMOS



REACH and RoHS compliant

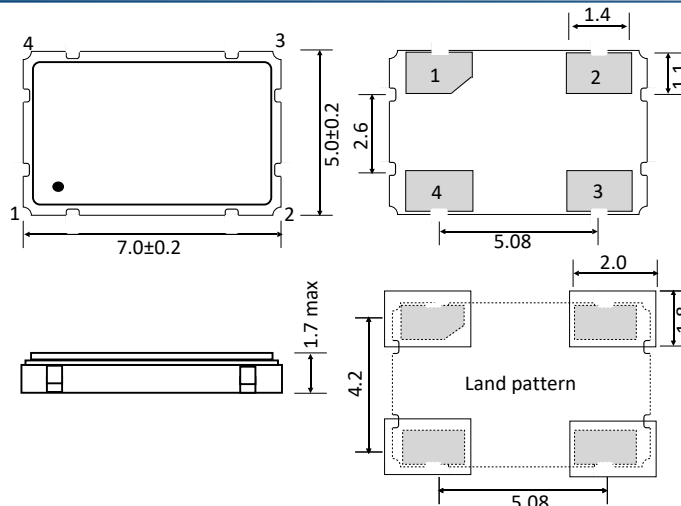
Supply voltage 1.0V, 1.2V, 1.8V, 2.5V, 3.3V, 5.0V



Parameters	Specification		Remarks
Frequency range	F_nom	1.0MHz ~ 160.0MHz	
Supply voltage	Vcc	1.0V, 1.2V, 1.8V, 2.5V, 3.3V, 5.0V	±5% tolerance
Frequency stability	F_stb	±25.0ppm, ±50.0ppm, ±100.0ppm	
Operating temperature range (°C)	Topr	-10°C ~ +70°C, -40°C ~ +85°C	
Storage temperature (°C)	Tstg	-55°C ~ +150°C	
Output waveform		HCMOS	
Output load		15pF typical	30pF, 50pF load available for 3.3V, 5.0V
Output voltage high	Voh	90% of Vcc min	
Output voltage low	Vol	10% of Vcc max	
Rise time/Fall time	Tr,Tf	1.0V, 1.2V :6 n sec. (Max.)	Measured between 10% to 90% of waveform
		1.8V, 2.5V: 7 n sec. (Max.)	
		3.3V, 5.0V: 10 n sec. (Max.)	
Duty cycle		45%/55%, 40%/60%	
Start-up time	T_str	5.0m sec max (1MHz~32MHz)	10.0m sec max (32MHz~160MHz)
Aging	F_age	±3.0 ppm per year (max)	
Moisture sensitive level	MSL	1	
ESD sensitive device		Yes	
Tristate function (pad 1)		>70% of Vcc to pad 1: enable oscillator output	
		<30% of Vcc to pad 1: Disable oscillator output (high impedance); Disable time 150 nsec max	
		No connection to Pad 1 : enable oscillator output	

Supply voltage	1.0V	1.2V	1.8V	2.5V	3.3V	5.0V
Current consumption (mA, Max)	1.0~1.5MHz 4.0mA Max	1.0~1.5MHz 4.0mA Max	1.0~1.5MHz 5.0mA Max	1.0~1.5MHz 5.0mA Max	1.0~1.5MHz 5.0mA Max	1.0~1.5MHz 5.0mA Max
	1.5~20MHz 4.0mA Max	1.5~20MHz 4.0mA Max	1.5~20MHz 8.0mA Max	1.5~20MHz 8.0mA Max	1.5~20MHz 8.0mA Max	1.5~20MHz 10.0mA Max
	20.0~60MHz 4.0mA Max	20.0~60MHz 4.0mA Max	20.0~50MHz 15.0mA Max	20.0~50MHz 15.0mA Max	20.0~50MHz 15.0mA Max	20.0~50MHz 20.0mA Max
			50.1~160MHz 22.0mA Max	50.1~160MHz 25.0mA Max	50.1~160MHz 35.0mA Max	50.1~100MHz 40.0mA Max

Dimensions(Unit:mm)



Pad 1 : Tri-state  
Pad 2 : Ground  
Pad 3 : Output  
Pad 4 : Supply voltage

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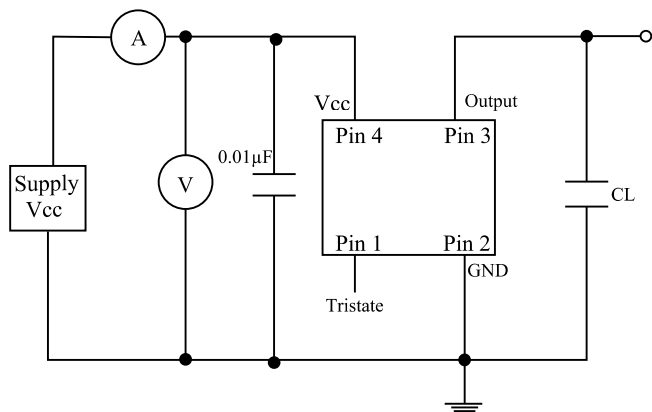
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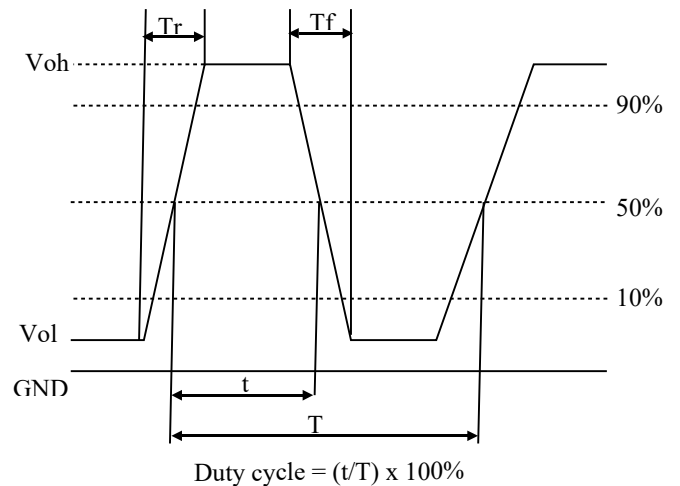
Part number generation									
RSE	2600	B	B	I	S	E	P	L	-PF
ACT series Code	Frequency (MHz)	Frequency stability ( $\pm$ ppm)	Supply voltage (V)	Operating temp. range ( $^{\circ}$ C)	Duty Cycle (%/%)	Output wave	Tristate	Tape & Reel	RoHS Code
RSE	< 100MHz First 4 digit of frequency  > 100MHz First 5 digit of frequency  Ex. 26.00MHz = 2600 8.00MHz = 0800 14.7456MHz = 1474	25 = C 50 = B 100 = A	1.2 = P 1.8 = D 2.5 = C 3.3 = B 5.0 = A	-10 ~ +70 = C -20 ~ +70 = B -40 ~ +85 = I	40/60 = S 45/55 = H	HCMOS 15pF = E HCMOS 30pF = Q HCMOS 50pF = U	Tristate = P No Tristate = N	Loose = L 1000 = C	-PF

Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below.  
Full Example part number : **RSE2600BBISEPL-PF [26MHz]**, **RSE1474BBISEPL-PF [14.7456MHz]**

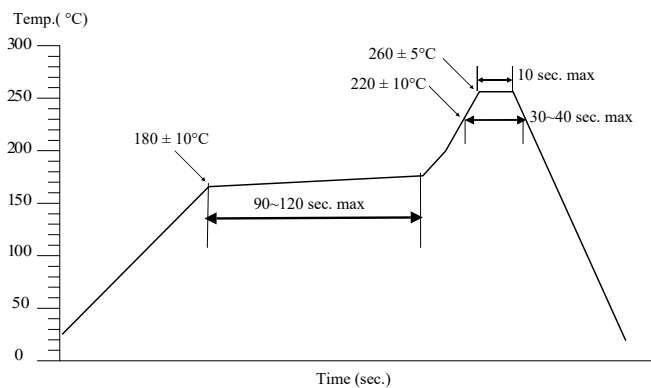
### Test circuit



### Waveform



### Solder reflow profile



Drawing control: (Internal use only)  
Commodity code: 854370 90 45  
Issue number : N2  
Date : 16/08/2019  
Internal reference : M6