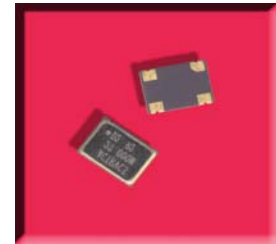


## ACT9200WC

Compatible with Eu Directive  
2002/EC - RoHS

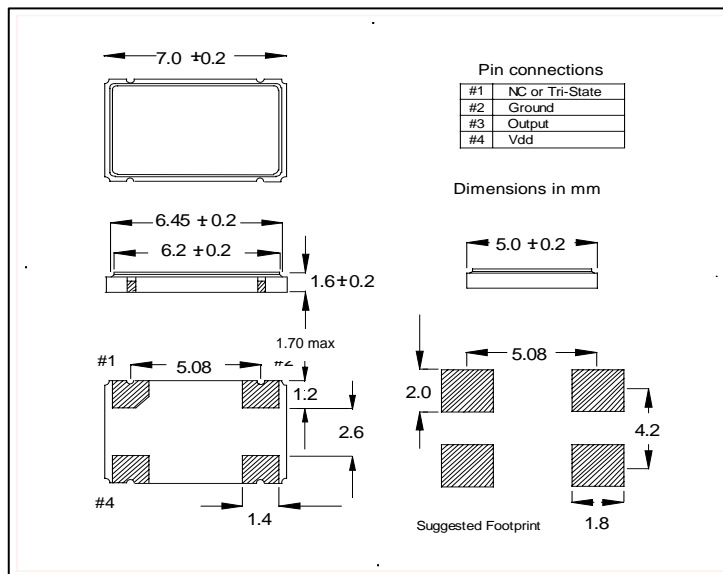
The **ACT9200 family** is a miniature, low profile SMD package, with a ceramic base utilising a seam welded metal lid for high reliability and better long-term stability. The metal lid is grounded through the package to assist with EMI emission reductions. This 7x5mm device is available as the ACT9200 in both 3V3 and 5V0. 1V8 and 2V5 versions are available as ACT9200L (See ACT9200L data sheet). Taped and reeled packaging (1k reels) and loose quantities are available for purchase, to suit high and low volume production.

( The ACT9200WC is the 32.768kHz version of the ACT9200 family. )



### SPECIFICATION

Parameter	Symb.	Specification	Condition
Supply Voltage	VDD	3.3VDC ± 10%	
Frequency Range	fo	32.768kHz	
Frequency Stability	Δf/fo	±100ppm	
Temp Operating Range	Topr	-20 ~ +70°C ( -40~85 °C Custom Option )	
Temp Storage Range	Tstg	-55 to +125°C	
Supply Current (max)	Iop	2.0mA max	
Duty Cycle	Tw/t	45/55%	
Output Level '0'	VOL	0.4VDC max (TTL) 10% VDD max (HCMOS)	
Output Level '1'	VOH	2.4VDC min (TTL) 90% VDD min (HCMOS)	
Rise & Fall Time (max)	TrTf	100nS max	
Output Load	N/CL	10TTL / 15pF	
Start-up Time	Tosc	10mS max	
Tri-state Input Voltage		No Connection VIH : ≥90% of VDD VIL : ≤10% of VDD	Enable output Enable output Disable output : High Impedance
Reflow		240 Deg C for 10sec max	
Aging	Fa	±3ppm p / year @ 25 Deg C	@25Deg C
Period Jitter (absolute)	Tj	3430pS max	



Pad surface  
Material Au

### APPLICATIONS

- Microprocessor clock
- PDA / notebook
- Wireless applications
- Audio
- Gigabit ethernet
- Fibre channel
- Instrumentation

**NOTE1:** To reduce HF power supply noise, an external bypass capacitor of 0.01μF close to ground and Vdd is recommended.

Please note that all parameters can not necessarily be specified in the same device

Customer to Specify : Frequency Stability, Operating Temperature Range, Output Type, Output enable, Voltage, Duty Cycle

In line with our ongoing policy of product evolution and improvement, the above specification may be subject to change without notice.

ISO9001: 2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

http://www.actcrystals.com

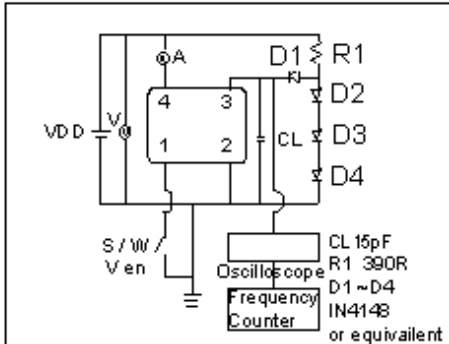
Issue : 4 SKr

Date : 15/02/05

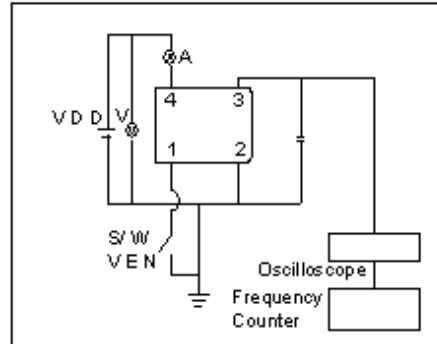
**ACT9200WC CIRCUIT DRAWINGS / SOLDER CONDITIONS / WAVE FORM**

www.DataSheet4U.com

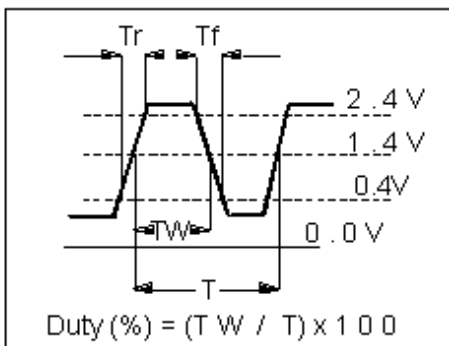
### TTL Test Circuit



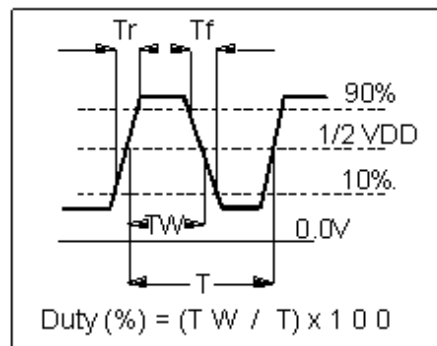
### CMOS Test Circuit



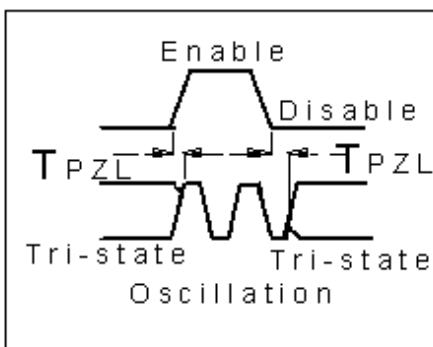
### TTL Waveform



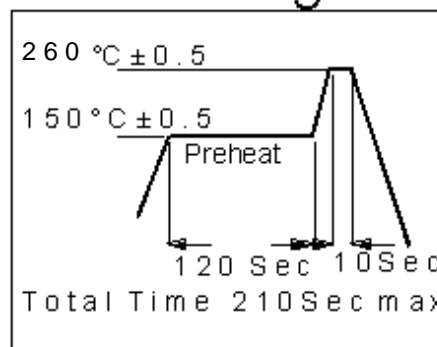
### CMOS Waveform



### Tristate Function



### Reflow Diagram



In line with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

**ISO9001: 2000 Registered**

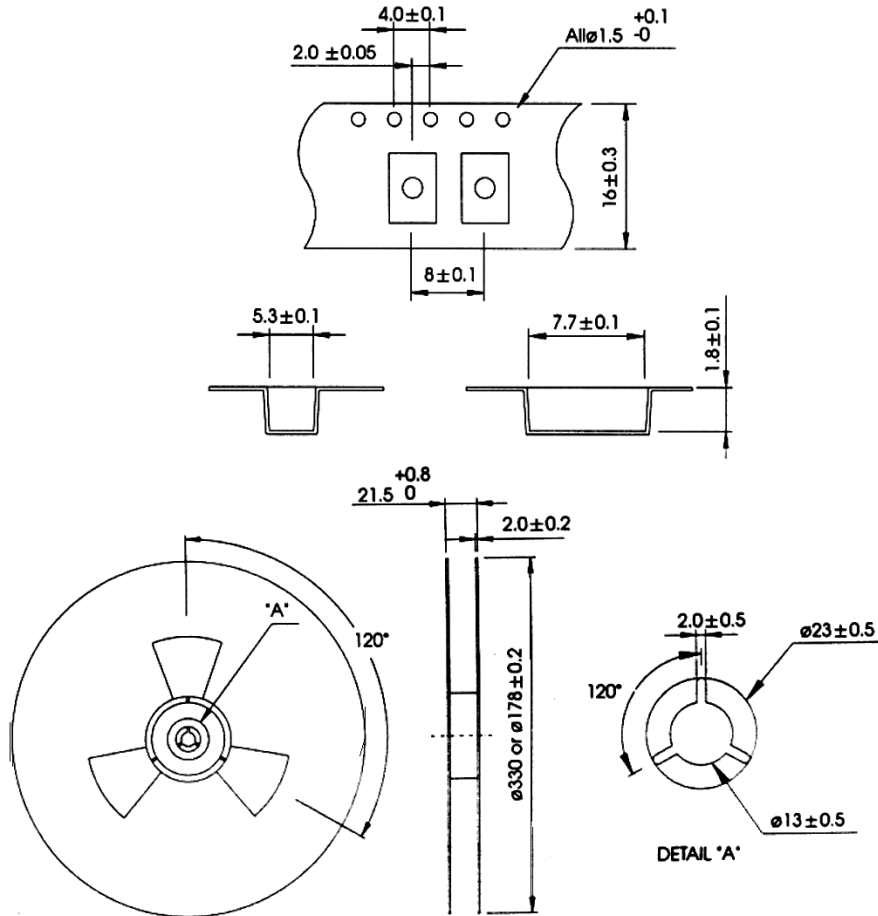
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 Date:15/02/05

**ACT9200WC CIRCUIT DRAWINGS / SOLDER CONDITIONS /WAVE FORM**  
 (Reels of 1000pcs standard)

www.DataSheet4U.com



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