

## **NEW JRO32: Miniature SMD Quartz Oscillator with 32.768 kHz**



### **Jauch announces a new Oscillator device:**

The JRO32 is a very small size SMD oscillator which is only offered in a frequency of 32.7680 kHz. It uses a tuning fork crystal internally and is designed for a very low power consumption. The JRO32 may typically be used for battery powered applications to feed real time clock devices (RTC).

#### **Background:**

After the introduction of the new JRO32 type, Jauch can offer two oscillator types in a frequency of 32.768 kHz.

There are several basic differences between JRO32 and JO75 low frequency type" which are explained below:

The JO75 uses an AT cut crystal and is available for temperature stabilities of +/-100ppm down to +/-25ppm in operating temperature range of -40°C ~ +85° C or +/-20ppm in -10°C ~ +70°C. It offers a HCMOS compatible output with "normal" rise & fall times (6nsec. max.) required to drive standard logic.

The JRO32 uses a tuning fork crystal, so the temperature stability curve looks like a tuning fork crystal. The JRO32 is especially designed for lowest power consumption, and therefore it has an output signal with a "slow" output rise & fall time (200nsec. max.).

Consequently, the customer must decide according to his application which would be the best matching type:

- JRO32 for lowest power consumption, stability comparable to tuning fork crystals or
- JO75 for better temperature stability and wider temperature range.

#### **Key-Features of the JRO32:**

- standard miniature-package: 3.2mm x 2.5mm x 1.0mm
- variable supply voltage - 1.5V ~ 5.0V
- low power type for Real Time Clocks (RTC)
- uses tuning fork crystal
- with Tristate Function
- **available Q4 2010**
- Ceramic / Metal package
- suitable for Lead-free soldering process at 260°C max
- **RoHS compliant**

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