



**Description**

**MR74035 – Trimmable Crystal Oscillator**  
0.18um BiCMOS 33.00MHz

**Part Number:**

MR74035

**Features:**

- High performance
- Low Phase noise & Low Jitter
- Low Mark Space Ratio (45% to 55%)
- Low Start Up Time (less than 5ms)
- Low power consumption (max 2.7mA)
- Low Standby current (max 1uA)

**Technology:**

Jazz SBC 0.18um  
Standard BiCMOS

**Deliverables:**

- GDSII
- Abstract
- Design Report
- Verilog- A Models
- Verilog Models

**Circuit Status:**

Silicon proven

**Design rights:**

Customer owned.

**Overview:**

- An amplifier cell configured as a crystal oscillator (Pierce Oscillator) operating at 33.000MHz.
- No external load capacitors or feedback resistors required
- Frequency accuracy is trimmable to <1ppm via tuning bus
- Fast start up times <5ms
- Low phase noise -145dBc/Hz@100kHz
- Operates from a single 2.6V power supply.
- Can be operated as a differential input clock buffer via external pin
- Output is buffered providing a square wave suitable for internal clocks.
- Can be powered down using the enable pins when a clock input is not required..

**Symbol View:**

