# FEATURES

PETERMANN TECHNIK
Time & Frequency Components

- **FUNDAMENTAL TECHNIQUE FOR LOW JITTER**
- HIGH RELIABILITY FOR LOW COST
- PECL OUTPUT SIGNAL
- COMPLEMENTARY OUTPUT OPTION
- JITTER OPTIMIZED DIP 14 PECL CLOCK OSCILLATOR
- EXCELLENT CLOCK SIGNAL GENERATOR FOR TELECOM AND TRANSMISSION SYSTEMS
- EXTENDED TEMPERATURE RANGE TO -40/+85°C

| | | | |
|---|---|---|---|
| **SERIES** | | | M6300 |
| **PACKAGE** | | | 14 PIN DIP |
| **FREQUENCY RANGE** | | | 120.0 ~ 200.0 MHz FUNDAMENTAL |
| **FREQUENCY STABILITY** | | | +-50 ~ +-100 ppm |
| **AGING** | | | +-5 ppm after first year |
| **OPERATING TEMPERATURE RANGE** | | | 0/+70°C ~ -40/+85°C |
| **STORAGE TEMPERATURE RANGE** | | | -55/+125°C |
| **INPUT** | | **VOLTAGE** | +3.3 VDC +-5% |
| | | **CURRENT** | 100 mA max. |
| **OUTPUT** | **SYMMETRY** | **STANDARD** | 40/60% (VDD -1.3 V LEVEL) |
| | | **OPTION** | 45/55% (VDD -1.3V LEVEL) |
| | **RISE AND FALL TIME PECL** | | 1.5 ns max. (20 ~ 80% PECL) |
| | **"0" LEVEL** | **PECL 3.3 VOLT** | VDD -1.62V max. |
| | **"1" LEVEL** | | VDD -1.02V min. |
| | **LOAD** | **PECL** | 50 Ω to VDD -2VDC |
| **PIN CONNECTION** | | | SEE OUTLINE DRAWINGS |
| **START-UP TIME** | | | 10 ms max. |
| **PERIOD JITTER RMS** | | | 4 ps typ. @ 155.520 MHz |
| OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION | | | |

## PART NUMBERING SYSTEM

| | |
|---|---|
| **EXAMPLE** | M6300-50-W-S-C-155.520MHz |

| | |
|---|---|
| SERIES | M6300 |
| FREQUENCY STABILITY | BLANK FOR 100 PPM |
| | 50 FOR 50 PPM |
| TEMPERATURE RANGE | BLANK FOR 0/+70°C |
| | N = -10/+60°C |
| | M = -20/+70°C |
| | W = -40/+85°C |
| SYMMETRY | BLANK FOR 40/60% |
| | S FOR 45/55% |
| COMPLEMENTARY OUTPUT | BLANK PIN 1 NOT CONNECTED |
| | C FOR COMPLEMENTARY OUTPUT |
| FREQUENCY | REQUIRED FREQUENCY |

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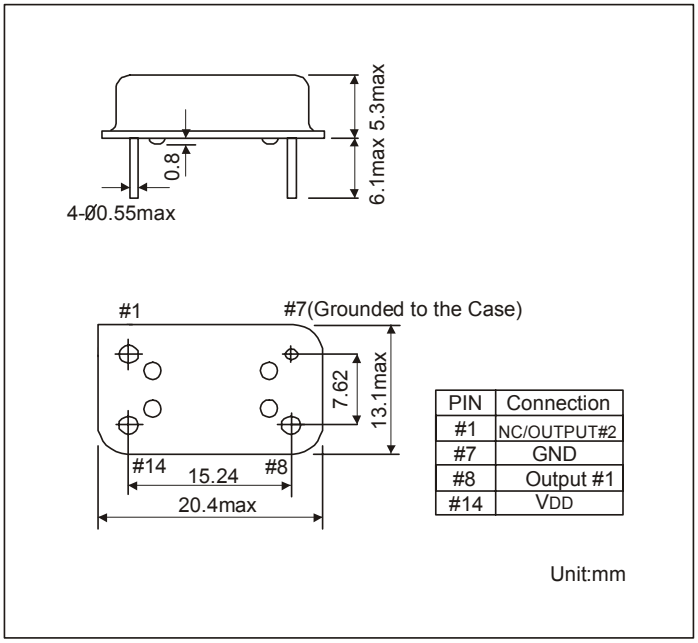
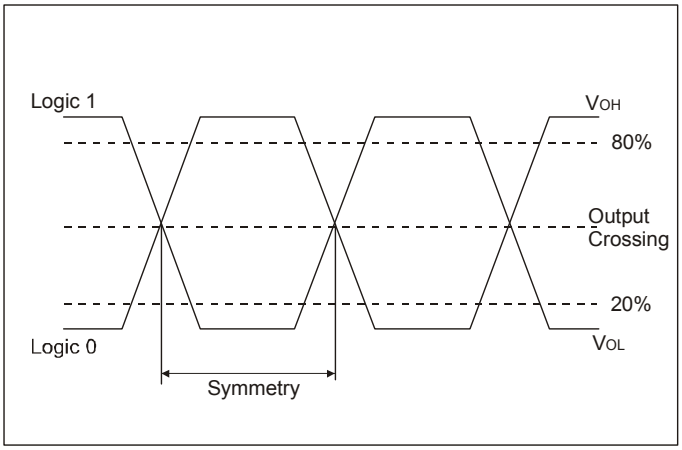
## OUTLINE DRAWING OF M6300

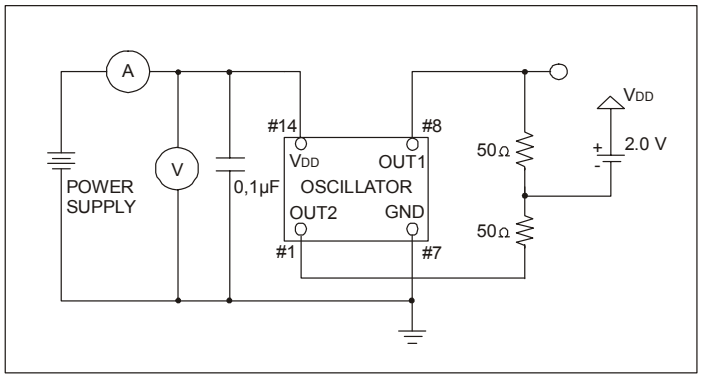



| PIN | Connection |
|---|---|
| #1 | NC/OUTPUT#2 |
| #7 | GND |
| #8 | Output #1 |
| #14 | VDD |

## PECL OUTPUT WAVE FORM




## TEST CIRCUIT FOR PECL

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