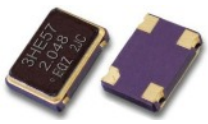
EUROQUARTZ

XON53 Oscillators

5 x 3.2mm, Wide Operating Temperature 1.75MHz to 60.0MHz

FEATURES

- **Femto second integrated phase jitter 150fs typical.**
- **Superior phase noise performance**
- **Wide operating temperature from -55° to +125°C**



SPECIFICATION

Model Number	**XON Series**			
Output Logic	LVCMOS			
Supply Voltage V_{DD}	1.8 V_{DD} ±10%	+2.5 V_{DD} ±10%	+3.3 V_{DD} ±10%	+5.0 V_{DD} ±10%
Logic High "1" (90% of V_{DD} minimum)	1.62V	2.25V	2.97V	4.5V
Logic Low "0" (10% of V_{DD} maximum)	0.18V	0.25V	0.33V	0.5V
Current Consumption (max.)	1.75 ~ 20MHz: 2mA	1.75 ~ 20MHz: 3mA	1.75 ~ 20MHz: 4mA	1.75 ~ 20MHz: 5mA
	20 ~ 60MHz: 4mA	20 ~ 60MHz: 5mA	20 ~ 60MHz: 6mA	20 ~ 60MHz: 8mA
Rise Time (Tr) / Fall Time (Tf)	7 ns max.	7ns max.	10ns max.	10ns max.
	Measured between 10% ~ 90% of wave form (CL = 15pF)			
Load	15pF			
Start-up Time	5ms max.			
Duty Cycle	Standard: 50%±10% ; Option 50% ±5% (Add "S" after the part number for this option)			
Tristate Function	Tristate function on Pad 1 is standard for XON series oscillators			
Phase Jitter (RMS) [25MHz, 3.3V]	150 fs typical (12kHz to 20MHz integrated)			

SSB Phase Noise [25MHz, 3.3V]	**Offset**	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz	5MHz
	dBc/Hz (typical)	-94	-127	-142	-156	-161	-163	-163
Storage Temperature	-55° to +125°C							
Ageing at 25°C	±2ppm maximum for first year							
Solder Profile	260°C max.							

ORDERING/PART NUMBER GENERATION

Example: 20.000MHz XON53050UMAS

Frequency

Series Designation XON53

Stability
050 = ±50ppm over -55° to +125°C
100 = ±100ppm over -55° to +125°C

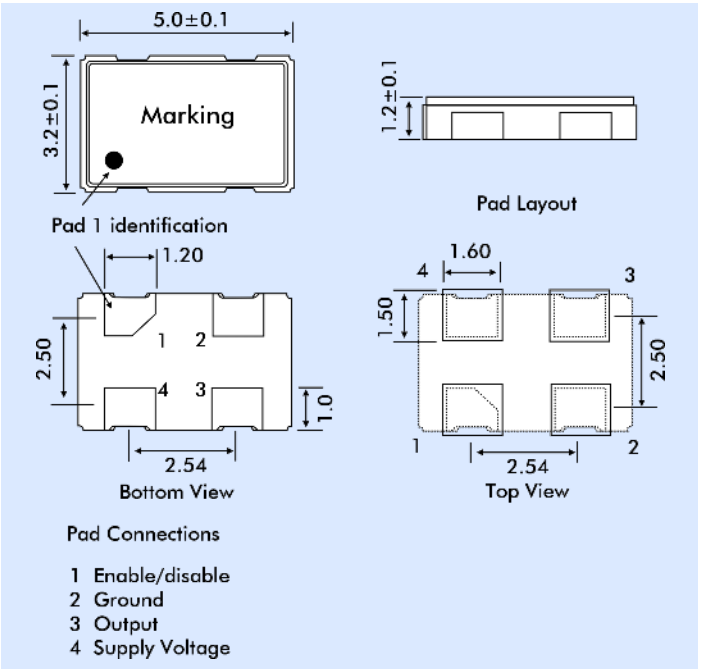
Output Universal (LVCMOS)

Operating Temperature Range
(-55° to +125° (Standard)

Supply Voltage
Blank = 5.0 Volts
A = 3.3 Volts
B = 2.5 Volts
C = 1.8 Volts

Option: Symmetry 50±5%

OUTLINE & DIMENSIONS



Issue 2

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