

### General Description

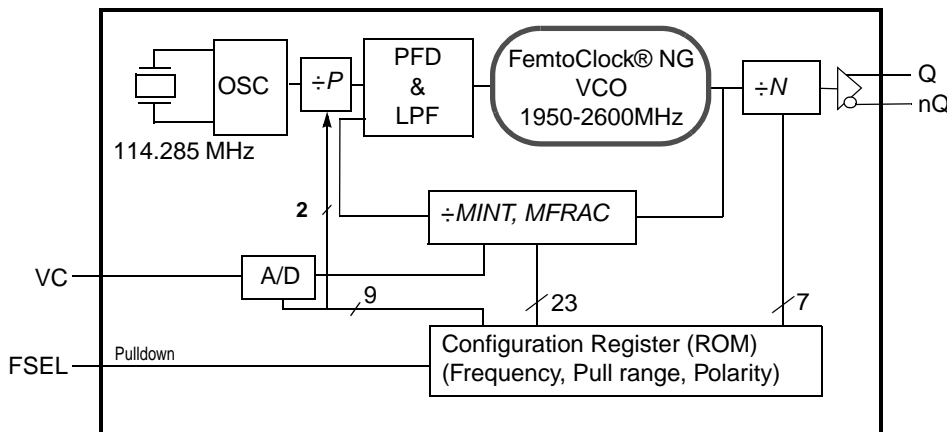
The IDT8N4DV85 is a LVDS Dual-Frequency Programmable VCXO with very flexible frequency and pull-range programming capabilities. The device uses IDT's fourth generation FemtoClock® NG technology for an optimum of high clock frequency and low phase noise performance. The device accepts 2.5V or 3.3V supply and is packaged in a small, lead-free (RoHS 6) 6-lead ceramic 5mm x 7mm x 1.55mm package.

The device can be factory-programmed to any two frequencies in the range of 15.476MHz to 866.67MHz and from 975MHz to 1300 MHz to the very high degree of frequency precision of 218Hz or better. The output frequency is selected by the FSEL pin. The extended temperature range supports wireless infrastructure, telecommunication and networking end equipment requirements.

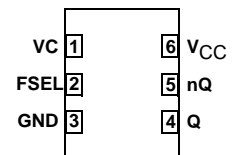
### Features

- Fourth generation FemtoClock® NG technology
- Programmable clock output frequency from 15.476MHz to 866.67MHz and from 975MHz to 1300MHz
- Two factory-programmed output frequencies
- Frequency programming resolution is 218Hz and better
- Absolute pull range (APR) programmable from  $\pm 4.5$  to  $\pm 754.5$ ppm
- One 2.5V or 3.3V LVDS clock output
- Output enable control input, LVCMOS/LVTTL compatible
- RMS phase jitter @ 156.25MHz (12kHz - 20MHz): 0.47ps (typical)
- 2.5V or 3.3V supply voltage
- -40°C to 85°C ambient operating temperature
- Lead-free (RoHS 6) 6-lead ceramic 5mm x 7mm x 1.55mm package

### Block Diagram

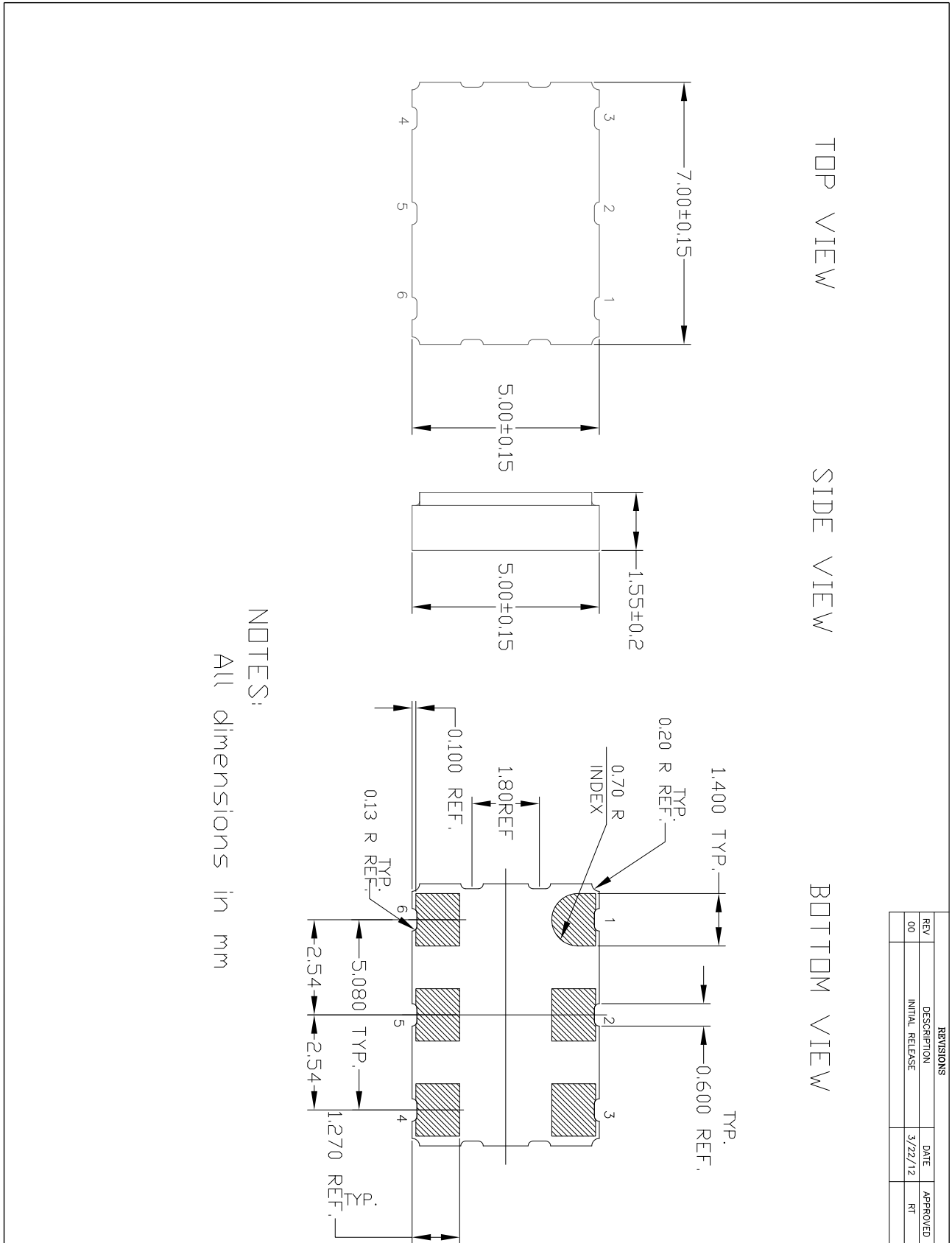


### Pin Assignment



**IDT8N4DV85**  
 6-lead ceramic 5mm x 7mm x 1.55mm  
 package body  
 CD Package  
 Top View

# Package Outline and Package Dimensions



NOTES:  
All dimensions in mm

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	3/22/12	RT