General Description

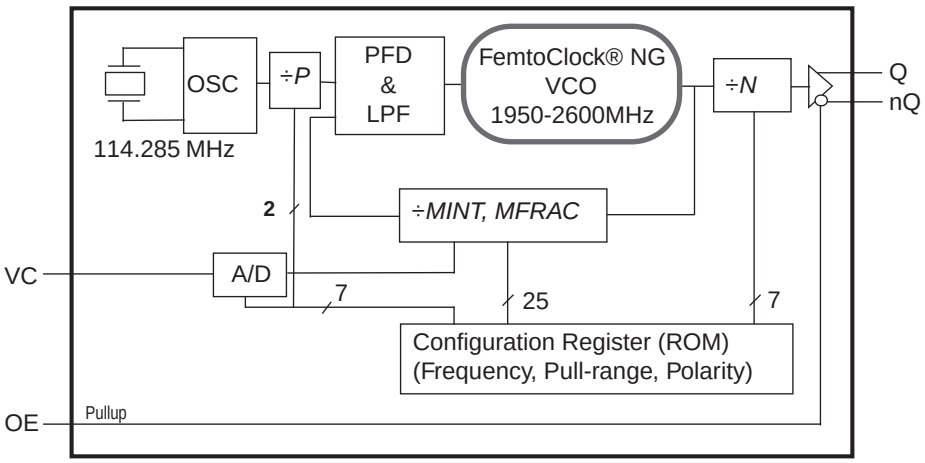
The IDT8N3SV75 is a LVPECL Frequency-Programmable VCXO with very flexible frequency and pull-range programming capabilities. The device uses IDT's fourth generation FemtoClock® NG technology for an optimum of high clock frequency and low phase noise performance. The device accepts 2.5V or 3.3V supply 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 frequency in the range of 15.476MHz to 866.67MHz and from 975MHz to 1,300MHz to the very high degree of frequency precision of 218Hz or better. The extended temperature range supports wireless infrastructure, telecommunication and networking end equipment requirements.

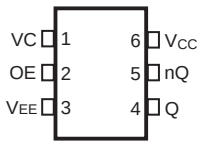
Features

- Fourth generation FemtoClock® NG technology
- Programmable clock output frequency from 15.476MHz to 866.67MHz and from 975MHz to 1,300MHz
- Frequency programming resolution is 218Hz and better
- Factory-programmable VCXO pull range and control voltage polarity
- Absolute pull range (APR) programmable from typical ±4.5 to ±754.5ppm
- One 2.5V/3.3V LVPECL clock output
- Output enable control input, LVCMOS/LVTTL compatible
- RMS phase jitter @ 156.25MHz (12kHz - 20MHz): 0.5ps (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

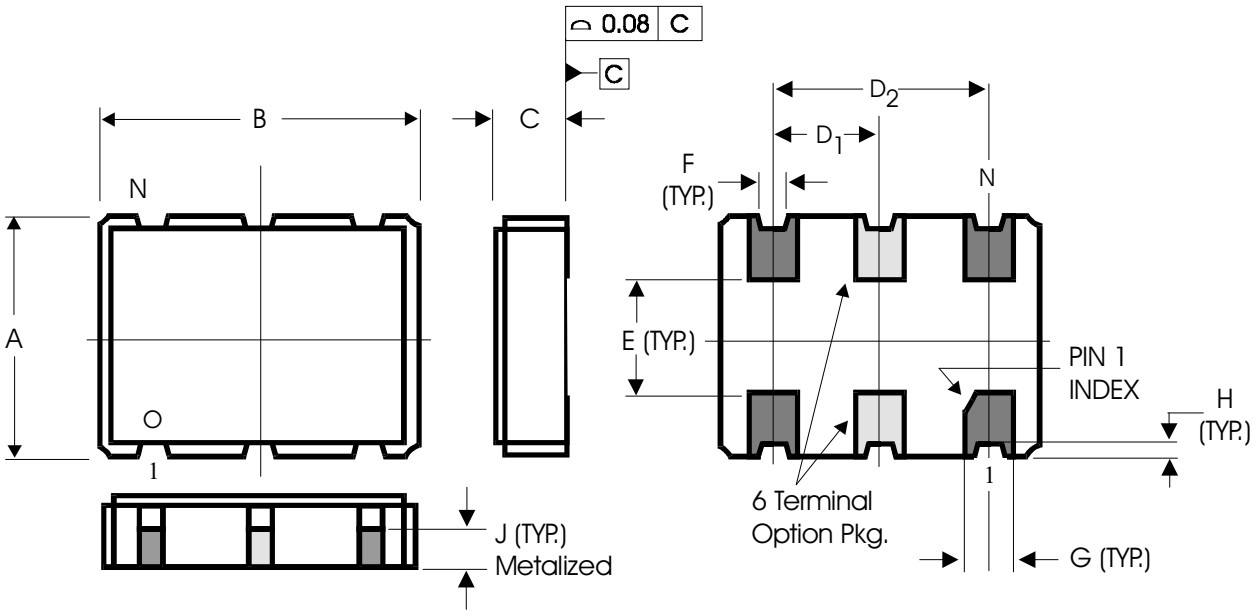


Pin Assignment



IDT8N3SV75
6-lead ceramic 5mm x 7mm x 1.55mm package body
CD Package
Top View

Package Outline and Package Dimensions



SYMBOL	DIMENSION IN MM		
	MIN.	NOM.	MAX.
A	4.85	5.00	5.15
B	6.85	7.00	7.15
C	1.35	1.50	1.65
D_1	2.41	2.54	2.67
D_2	4.95	5.08	5.21
E	2.47	2.6	2.73
F	0.47	0.60	0.73
G	1.27	1.40	1.53
H	-	0.15 Ref.	-
J	-	0.65 Ref.	-