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NTE1233
Integrated Circuit
Frequency Synthesizer

Description:

The NTE1233 consists of a crystal oscillator, 10 bit divider, phase comparator and a programmable divided–by–N 9 bit counter constructed with complementary MOS device in one chip monolithic structure. This device has been designed for use in frequency synthesizers and phase locked loop applications for CB transceiver requiring low power dissipation and high noise immunity.

Absolute Maximum Ratings: (T_A = +25°C, unless otherwise specified)

Supply Voltage, V_{DD} . . . . . –0.3 to +7V
Input Voltage, V_{IN} . . . . . –0.3 to V_{DD} +0.3
Power Dissipation, P_D 250mW
Operating Temperature Range, T_{opg} . . . . . –30° to +70°C
Storage Temperature Range, T_{stg} . . . . . –55° to +125°C

Electrical Characteristics: (T_A = +25°C, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Supply Voltage Range	$_VDD$		5.0	–	6.5	V
Supply Current	I_{DD}	N = 256	–	–	9	mA
Prog. Divder Input Frequency Max.	$F_{MAX(P)}$	V_{DD} = 4.5V	4.0	–	–	MHz
Ref. Frequency Input Max.	$F_{MAX(R)}$		10.24	–	–	MHz
Prog. Divider Input Voltage	V_{PIN}		1.0	–	–	V_{p-p}
Ref. Divider Input Voltage	V_{RIN}		1.5	–	–	V_{p-p}
High Level Output Current (D_O)	I_{OH}	V_{OH} = 4.0V	–0.5	–	–	mA
Low Level Output Current (D_O)	I_{OL}	V_{OL} = 1.0V	0.5	–	–	mA
High Level Output Current (LD)	$I_{OH(LD)}$	V_{OH} = 4.0V	–0.5	–	–	mA

Pin Connection Diagram