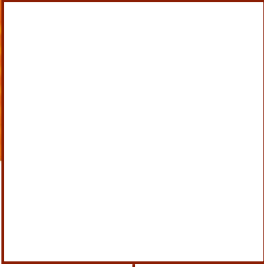
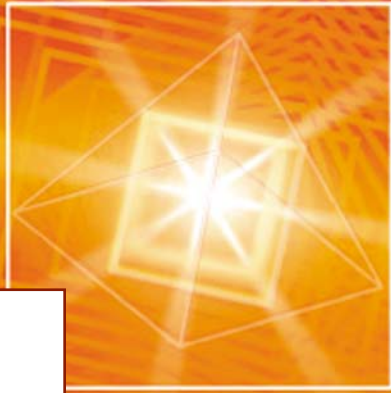


FREQUENCY



S110

January 07th, 2004

OVEN CONTROLLED CRYSTAL OSCILLATOR

DOC 4838 - W1

S110

OVEN CONTROLLED CRYSTAL OSCILLATOR

	Symbol	Value			Unit	Note
		Min.	Nom.	Max.		
Main Parameters Nominal Frequency	F0		26		MHZ	@25°C, @Vc=2V ±1V
Temperature Range Operating G1	Otr1	0		70	°C	
Storage	Sto	-40		85	°C	
Power Supply Power Supply	Vcc	4,75	5	5,25	V	1Vcc ±5%
Consumption VS Temperature range	Itr	70	25		°C	
Max values at steady state	Iss	120	250	500	mA	
Max values during Warm-up	Iwu			800	mA	
Frequency control voltage Frequency pulling range	Fpr	1			±ppm	Referred to nominal frequency
Voltage Control	Vc	0		Vref	V	Slope positive
Input impedance	Zin	200			KOhm	
Linearity	Lin			10	%	Least squares straight
Reference Voltage	Vref	3,8	4	4,2	V	
Zout or Iout for Vref	Iout			1	mA	
Output Signal Waveform Level	Square Ovl				V	0 < Vol < 0.5V 4.5V < Voh
Harmonics / Duty cycle	DCY	40		60	%	
Sub Harmonics / Rise Time	SHAR			5	ns	
Non Harmonics / Fall Time	NHAR			5	ns	
Load	Load	15		45	pF	
Frequency Stability VS Temperature Range G1	Fd1			10	±ppb	Referred to frequency @ 25°C
VS Power Supply variation	Fd3			5	±ppb	Vcc±5%
VS Load variation	Fd4			5	±ppb	Load changing from max to min
VS Warm Up time	Fd5	5 mn	10 mn	30 mn	±ppb	Referred to frequency 1 hour after power ON
		50	10			

	Symbol	Value			Unit	Note
		1 day	1 month	1 year		
Ageing Medium/Long Term Stability	Agg	0,1		30	±ppb	After continuous operating for 30 days

	Symbol	Values					Unit
		10 Hz	100 Hz	1 KHz	10 KHz	100 KHz	
Phase Noise Static Conditions	Pns	-90	-120	-130	-140	-150	dBc/Hz

Note	
Mechanicals Conditions Shocks	IEC 68-2-27:Test Ea 50g / 11 ms
Sine Vibrations	IEC 68-2-6:Test Fc 5g / 10 to 150Hz
Complementary Specification	Dedicated to GSM Application, overall 1 year < 50ppb

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OVEN CONTROLLED CRYSTAL OSCILLATOR

Package / Pin Out		Note / Unit
Package Ref.	45-18	See Last Page
Package Type	BO 3-34	
Maximum package height	19	mm
Label	YYWW/Ser Nb - FO=26 MHz - DOC4838	
Pin Out	1: Control voltage (Vc) 2: Reference Voltage (Vref) 3: Supply voltage (Vcc) 4: RF output 5: GND Case	

BOTTOM VIEW

