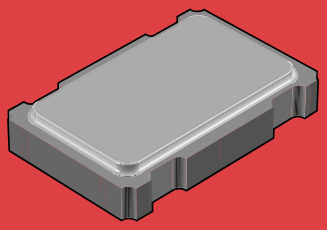
RXD505/RXD503 SERIES



FEATURES

- 3x5 mm footprint
- SMD
- 3 & 5 V versions
- Seam welded package
- Tape and Reel (1,000 pcs)

SMD CLOCK OSCILLATOR

The RXD505 (5V) and RXD503 (3V) is our smallest crystal controlled low-current clock oscillator. This subminiature, very low profile leadless ceramic package is ideal for today's SMD manufacturing environment. Package is seam welded with a metal lid.

PART NUMBERING GUIDE *"EXAMPLE"*

PART NUMBER		(STABILITY TOLERANCE (1= ±50 PPM)		FREQUENCY
RXD503	–	1	–	20.000

Sample Part Number: RXD505-20.000-1

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	RXD505 (5V)			RXD503 (3.0V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
FREQUENCY RANGE		2.500		35.000	2.500		66.666	MHz
FREQUENCY STABILITY**	Standard	-100		+100	-100		+100	PPM
	Option (1)	-50		+50	-50		+50	PPM
	Option (0)**	-30		+30	-30		+30	PPM
OPERATING TEMPERATURE		-10		+70	-10		+70	˚C
STORAGE TEMPERATURE		-55		+125	-55		+125	˚C
INPUT VOLTAGE Vcc		+4.5	+5	+5.5	+2.7	+3.0	+3.3	V DC
INPUT CURRENT	2.5 ~ 35.0 MHz			15			10	mA
	35.0 ~ 50.0 MHz			-			15	mA
	1.8 ~ 36.0 MHz			-			20	mA
OUTPUT SYMMETRY	@ 1/2 Vcc Level	40/60	50 ±4	60/40	40	50 ±4	60	%
RISE AND FALL TIMES				10			10	ns
LOGIC "0" LEVEL	Vcc x 0.1V max.							
LOGIC "1" LEVEL	Vcc x 0.9V max.							
LOAD				15			15	pF
STANDBY CURRENT	(No Oscillation)			10			10	µA
START-UP				10			10	m

** Inclusive of 25˚C tolerance, operating temperature range, input voltage change, load change, aging shock and vibration.*
*** Reduced operating temperature with option C (±30 PPM) -10˚ ~ +60˚C*

PACKAGE DIMENSIONS (mm)

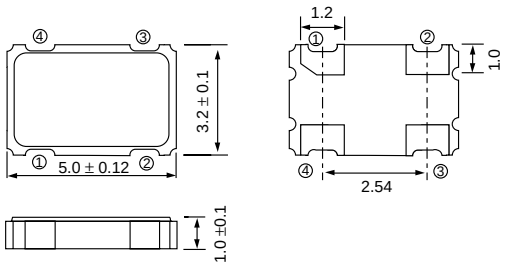


Figure 1) RXD505/503 Series Top, Side and Bottom Views

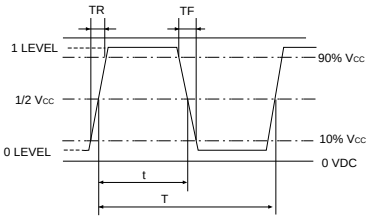
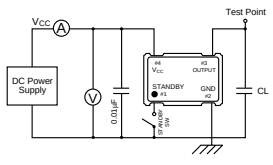


Figure 2) Output Waveform

RXD505 (5V) Standby Control Voltage	
PIN #1 = OPEN	#3 = OUTPUT
PIN #1 = +3.5V MIN	#3 = OUTPUT
PIN #1 = 1.5V MAX	#3 = NO OSCILLATION

RXD503 (3V) Standby Control Voltage	
PIN #1 = OPEN	#3 = OUTPUT
PIN #1 = +2.1V MIN	#3 = OUTPUT
PIN #1 = 0.9V MAX	#3 = NO OSCILLATION



CL: Including fixture and probe capacitance.

Figure 3) Test Circuit

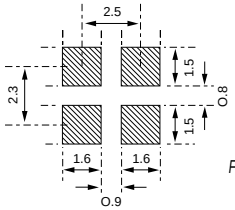


Figure 4) Land Pattern

PIN CONNECTIONS	
#1	Standby
#2	GND
#3	OUTPUT
#4	Vcc

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