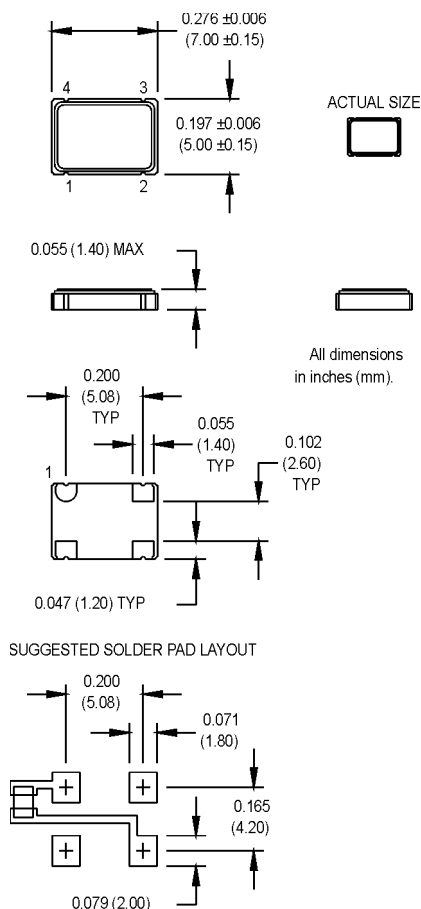


M2035, M2036, and M2037 Series 5.0 x 7.0 x 1.4 mm HCMOS Compatible Surface Mount Oscillators



- ± 20 ppm stability
- Standby function
- Ideal for WLAN and IEEE802.11 Applications



Pin Connections

PIN	FUNCTION
1	Standby
2	Ground
3	Output
4	+Vdd

Ordering Information

	M203X	D	8	Q	C	N	00.0000 MHz
Product Series	M2035 = 2.85V M2036 = 3.0V M2037 = 3.3V						
Temperature Range	D: -10°C to +70°C 6: -20°C to +70°C 2: -40°C to +85°C						
Stability	3: ± 100 ppm 6: ± 25 ppm	4: ± 50 ppm 8: ± 20 ppm **					
Output Type	Q: Standby Function						
Symmetry/Logic Compatibility	C: 45/55 CMOS						
Package/Lead Configurations	N: Leadless						
Frequency (customer specified)							

** -10° to +70° only

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Frequency Range	F	1.5		125	MHz	See Note 1
Frequency Stability	$\Delta F/F$			± 20	ppm	See Note 2
Operating Temperature	T _A	(See Ordering Information)				
Input Voltage	V _{dd}	3.15 2.85 2.7	3.3 3.0 2.85	3.45 3.15 3.0	V	3.3V 3.0V 2.85V
Input Current	I _{dd}			15 20 30 55	mA	3.3V
Symmetry (Duty Cycle)		45		55	%	1/2 V _{dd}
Rise/Fall Time	Tr/Tf			4 6	ns	See Note 2 10% to 90% V _{dd} 10% to 90% V _{dd}
Logic "1" Level	V _{oh}	90% V _{dd}			V	
Logic "0" Level	V _{ol}			10% V _{dd}	V	
Output Current	I _{oh}	-2			mA	
	I _{ol}	+2			mA	
Output Load				15	pF	
Start-up Time				5	ms	
Standby Current				10	μA	
Standby Function		Pin 1 high or floating: clock signal output Pin 1 low: output disables to high impedance				
Output Disable Time				150	ns	
Output Enable Time				5	ms	
Mechanical Shock		Per MIL-STD-202, Method 213, Condition C				
Vibration		Per MIL-STD-202, Method 201 & 204				
Reflow Solder Conditions		240°C for 10 s max.				
Hermeticity		Per MIL-STD-202, Method 112 (1 x 10 ⁻⁶ atm.cc/s of helium)				
Solderability		Per EIAJ-STD-002				

1. Consult factory for available frequencies in this range.

2. Inclusive of calibration, deviation over temperature, supply voltage change, load change, shock, vibration, and 10 years aging.

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