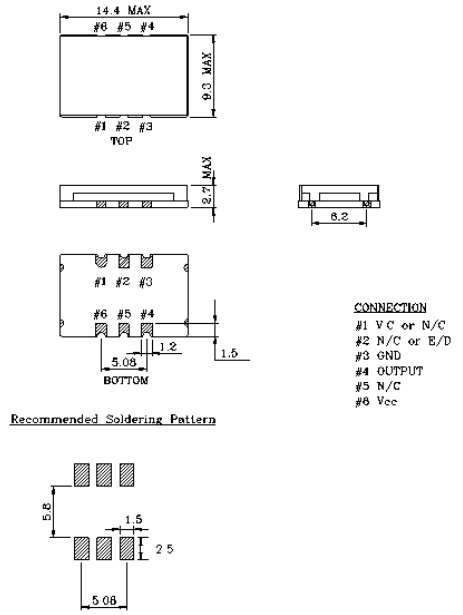
VCXO
PV142B Series
HCMOS/TTL
6PAD SMD PACKAGE

* PART NUMBERING GUIDE

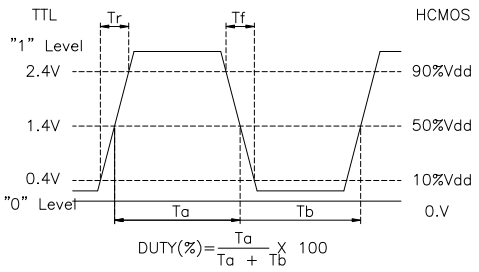
P V 1 4 2 B - 5 H 2 0 3 D 5 E - 1 0 0 . 0 0 0 M

- Supply Voltage
  - 5 : 5.0V
  - 3 : 3.3V
- Output
  - H : HCMOS/TTL
- Stability vs. Temperture
  - See Table1
- Temperature Range
  - Table2
- Pulling Range
  - 2 : ± 20 ppm min
  - 5 : ± 50 ppm min
  - 10 : ±100 ppm min
  - 15 : ±150 ppm min
- Frequency
  - M : MHz
- E : 2PIN E/D
- Blank : 2PIN N.C

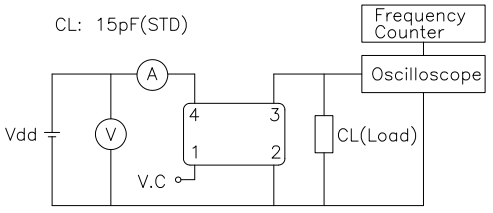
MECHANICAL DIMENSIONS



OUTPUT WAVEFORM



TEST CIRCUIT



ELECTRICAL SPECIFICATION

Frequency range	1.000MHz to 200.000MHz
Frequency Stability vs. Temperature vs. Aging	 ± 10 ppm to ±50ppm ±2.0 ppm max/ year
Temperature Range Operating Storage	 See Table 2 -55℃ to 125℃
Supply Voltage	3.3V ± 5% 5.0V ± 5%
Input Current	1.000MHz ~ 40.000MHz ~ 200.000MHz 5mA max ~ 30mA max ~ 50A max
Output characteristics HCMOS / TTL	HCMOS / TTL Logic "1" 90% Vdd min / 2.4V min Logic "1" 10% Vdd max / 0.4V max Load 15pF / 10TTL Duty Cycle 40/60 / 40/60 Rise & Fall 10nS max / 10nS max
Pull Characteristics	
Pulling Range Control Range	±20ppm /±50ppm /±100 /±150 ppm min 1.65V ± 1.5V (Vdd : 3.3V) 2.5V ± 2.0V/2.5V (Vdd : 5.0V)
Phase noise @100MHz	-140dBc/Hz @1KHz offset Noise floor -165dBc

ENVIROMENTAL & MECHANICAL SPECIFICATION

Shock	MIL-STD-883C, Method 2002, Condition B
Vibration	MIL-STD-883C, Method 2007, Condition A
Solderability	MIL-STD-883C, Method 2003
Seal integrity	MIL-STD-883C, Method 1014, Condition C & A2
Marking	MIL-STD-202F, Method 215

TABLE1

Symbol	Stability
10	± 10ppm
15	± 15ppm
20	± 20ppm
30	± 30ppm
50	± 50ppm

TABLE2

Symbol	Temp.	Symbol	Temp.
0	0℃	A	50℃
1	-10℃	B	60℃
2	-20℃	C	70℃
3	-30℃	D	75℃
4	-40℃	E	80℃
5	-50℃	F	85℃
6	-55℃	G	105℃
		H	125℃