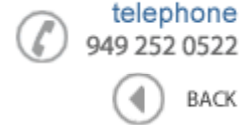


**Data Sheet**

Product Category: SMD Oscillators

Series Number	Package	Description	Last Modified
493	6 Pad PCB Base	PECL Output	Jan. 01 2007

FEATURES

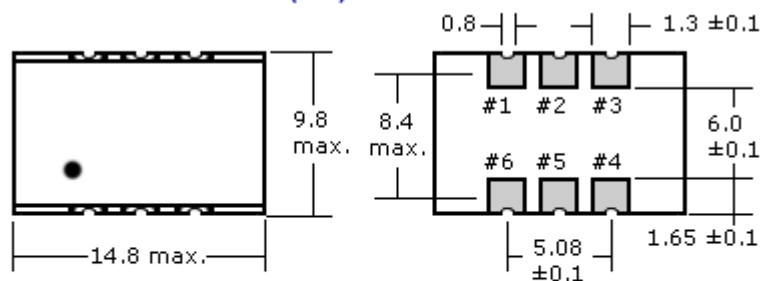
- Wave form symmetry of 45/55%
- PECL / LVPECL output
- Industry standard 6 Pad PCB SMD Package
- RoHs / Lead Free compliant

**OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

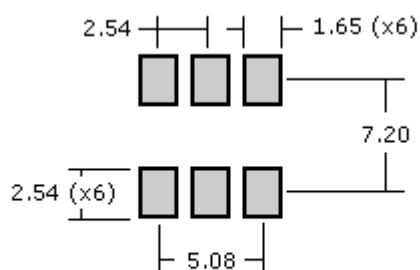
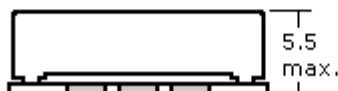
PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS
Output Logic	-	Positive ECL Square Wave (PECL)		-
Input Voltage (VDD)	-	3.3 $\pm$ 5%	5.0 $\pm$ 5%	V
Frequency Range (f_O)	-	19.440 ~ 180.000		MHz
Operating Temperature (T_{OPR})	-	0 ~ +70 (Std.) / -40 ~ 85 (Option)		°C
Storage Temperature (T_{STG})	-	-55 ~ +125		°C
Overall Frequency Stability	-	$\pm$ 20, $\pm$ 25, $\pm$ 50, $\pm$ 100 max.		ppm
	(a) Frequency Tolerance	Inclusive of Overall Stability		-
	(b) Temperature Stability	Inclusive of Overall Stability (Operating Temperature)		-
	(c) Input Voltage Stability	Inclusive of Overall Stability (VDD $\pm$ 5%)		-
	(d) Load Stability	Inclusive of Overall Stability (RL $\pm$ 5%)		-
Input Current (I_{DD})	-	80 max.	120 max.	mA
Aging	@ 25°C	$\pm$ 3 max.		ppm/Y
Rise Time (T_R)	20% to 80% of Waveform	1 max.		nS
Fall Time (T_F)	20% to 80% of Waveform	1 max.		nS
Output Voltage High "1" VOH	PECL	Vcc - 1.025 min.	Vcc - 0.88 min.	Vdc
Output Voltage Low "0" VOL	PECL	Vcc - 1.620 max.	Vcc - 1.555 max.	Vdc
Load	Vdd - 2.0Vdc	50		Ohms
Duty Cycle	50% of Waveform	50 $\pm$ 10 (Std.) / 50 $\pm$ 5 (Option)		%
Jitter	RMS	1 max.		pS

PIN CONNECTIONS

PACKAGE DIMENSIONS (mm)



#1	Tri-State or No Connection
#2	No Connect or Tri-State
#3	Ground
#4	Output
#5	Complimentary Output
#6	+Vcc



Suggested Solder Pad Layout

PART NUMBER GUIDE

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (°C)	Duty Cycle	Tri-State Pin Position
493	- 28.0 M	- 3	E	N	- T	TS1
Oscilent SMD Oscillators	Enter your freq. e.g. 28.0M = 28.00 MHz	5 = 5VDC 3 = 3.3VDC	D = ±100 PPM E = ±50 PPM F = ±25 PPM G = ±20 PPM	Blank* = 0~+70 D = -20~+70 K = -30~+85 N = -40~+85 P = 0~+85	Blank* = 50±10% T = -50±5%	TS1 = Pin # 1 TS2 = Pin # 2
NOTE: - Deviations on all parameters available. Please consult Oscilent for details. DEFINITIONS: - Click on the characteristic names above, for definitions of the particular characteristic. *STANDARDS: - "Blank" part number selections, indicate standard variables for the particular characteristic. PACKAGING: - Add -TR for Tape/Reel. Click here for tape/reel specifications						

Oscilent Corporation - CALL **949.252.0522**Series No.: **493**
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