

2.5V HCMOS CERAMIC SMD OSCILLATOR WITH STANDBY

F540L SERIES

FEATURES

- 2.5V Operation
- HCMOS Output
- Low Power Consumption
- Standby Function
- Tape and Reel (2,000 pcs. STD)
- Pb Free



• MODEL NUMBER SELECTION

Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
F540L	±100PPM	-10 ~ +70	1.800 ~ 50.000
F540LR	±100PPM	-40 ~ +85	1.800 ~ 50.000
F545L	±50PPM	-10 ~ +70	1.800 ~ 50.000
F545LR	±50PPM	-40 ~ +85	1.800 ~ 50.000
F546L	±25PPM	-10 ~ +70	1.800 ~ 50.000
F546LR	±25PPM	-40 ~ +85	1.800 ~ 50.000
F548L	±20PPM	-10 ~ +70	1.800 ~ 50.000

• ELECTRICAL CHARACTERISTICS

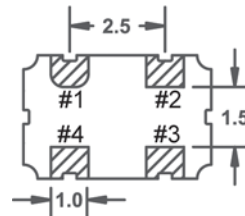
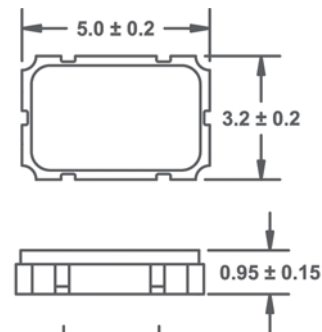
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	1.800 ~ 50.000 MHz
Storage Temperature Range (TSTG)	-55°C ~ +125°C
Supply Voltage (VDD)	2.5V ± 5%
Input Current (IDD)	
1.800 ~ 32.100 MHz	10mA
32.100+ ~ 50.000 MHz	12mA
Output Symmetry (50% VDD)	45% ~ 55%
Rise Time (10% ~ 90% VDD) (TR)	5nS
Fall Time (90% ~ 10% VDD) (TF)	5nS
Output Voltage (VOL)	10% VDD
(VOH)	90% VDD Min
Output Current (IOL)	4mA Min
(IOH)	4mA Min
Output Load (HCMOS)	15pF
Standby Current	10μA
Start-up Time (Ts)	10mS
Output Disable Time ²	150nS
Output Enable Time ²	10mS

¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

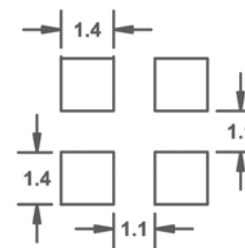
² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

See page 30 for mechanical specifications, test circuits, and output waveform.

All specifications subject to change without notice. Rev. 11/10/03



Recommended Solder Pad Layout



Pin Connections

#1 E/D #3 Output
#2 GND #4 V DD

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

INH (Pin 1)	OUTPUT (Pin 3)
OPEN ²	ACTIVE
'1' Level VIH ≥ 70% VDD	ACTIVE
'0' Level VIL ≤ 30% VDD	High Z

See page 60 for tape and reel specifications.