1.8V HCMOS Automotive Grade SMD Oscillator

Model: FA510 SERIES Page 1 of 2 RoHS Compliant / Pb Free / REACH Compliant



Need a

Sample®

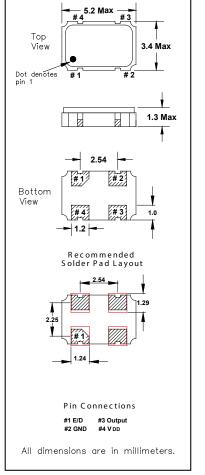
FEATURES

- AEC-Q200 Qualified
- TS-16949 Certified
- Temperature range from $-40^{\circ}C \sim +125^{\circ}C$
- Seam Seal
- Tape and Reel (1,000 pcs. STD)

PART NUMBER SELECTION				
Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
552A-Frequency-xxxxx	FA510R	±100PPM	-40~+85	2.000~48.000
551A-Frequency-xxxxx	FA510	±100PPM	$-40 \sim +125$	$2.000 \sim 48.000$
554A-Frequency-xxxxx	FA515R	±50PPM	$-40 \sim +85$	$2.000 \sim 48.000$
553A-Frequency-xxxxx	FA515	±50PPM	$-40 \sim +125$	$2.000 \sim 48.000$
556A-Frequency-xxxxx	FA516R	±25PPM	-40 ~ +85	$2.000 \sim 48.000$

ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)	
Frequency Range (Fo)	$2.000 \sim 48.000 \ \text{MHz}$	
Storage Temperature Range (TSTG)	-55°C ~ +150°C	
Supply Voltage (VDD)	$1.8V \pm 5\%$	
Input Current (IDD)		
2.000 ~ 9.9999999 MHz	5 mA	
10.000 ~ 31.999999 MHz	6 mA	
32.000 ~ 48.000 MHz	15 mA	
Output Symmetry (50% VDD)	$40\% \sim 60\%^3$	
Rise/Fall Time		
(10% ~ 90% VDD Levels)	6.5nS	
Output Voltage (VOL)	10% VDD	
(Vон)	90% VDD Min	
Output Current (IOL)	2mA Min	
(Іон)	-2mA Min	
Output Load (HCMOS)	15pF	
Standby Current (Ist)	10μΑ	
Start-up Time (Ts)	10mS	
Output Disable Time ²	100nS	
Output Enable Time ²	10mS	
Aging (per year @25C)	±5 PPM	
Maximum Soldering Temp / Time	260°C / 10 Seconds	
Moisture Sensitivity Level (MSL)	1	
Termination Finish	Au	



¹ Inclusive of 25°C tolerance, operating temperature range.

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

³45/55 symmetry available on an inquiry basis.

Notes: A $0.01 \mu F$ bypass capacitor should be placed between VDD (Pin 4) and GND (Pin 2) to minimize power supply line noise.

Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary. All specifications subject to change without notice.

ENABLE / DISABLE FUNCTION				
(Pin 1)	OUTPUT (Pin 3)			
OPEN ²	ACTIVE			
'1' Level VIH $\ge 80\%$ VDD	ACTIVE			
'0' Level VIL $\leq 20\%$ VDD	High Z			

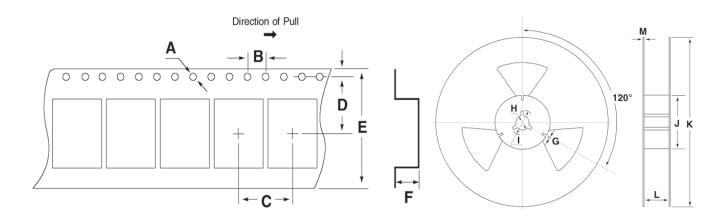
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lator FOX Rev. 2/27/2012



 REEL SPECIFICATIONS (millimeters) TAPE SPECIFICATIONS (millimeters) G н J MODEL Т Κ MODEL Α В С D Е F STD Reel QTY L Μ FA510 Series 2.0 Ø13 Ø21 Ø62 Ø180 13.5 2.0 FA510 Series Ø1.5 4.0 8.0 5.5 12.0 1.5 1,000



PRODUCT USE

Model: FA510 SERIES

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Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. FOX products are not intended for use in life support systems or similar devices where the failure or malfunction of a FOX product can be reasonably expected to significantly affect the health or safety of users. Anyone using a FOX product in such

a manner does so at their own risk, absent an express, written agreement by FOX.