3.3V HCMOS Automotive Grade SMD Oscillator



Model: FA530 SERIES

RoHS Compliant / Pb Free / REACH Compliant

Rev. 2/27/201

http://www.foxonline.com/need_a_sample.htm

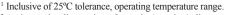
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FEATURES

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

| PART NUMBER SELECTION | | | | | | | |
|-----------------------|--------|------------------------|------------------|-----------------|--|--|--|
| Part Number | Model | Frequency | Operating | Frequency | | | |
| | Number | Stability ¹ | Temperature (°C) | Range (MHz) | | | |
| 475B-Frequency-xxxxx | FA530R | ±100PPM | -40 ~ +85 | 2.000 ~ 135.000 | | | |
| 474B-Frequency-xxxxx | FA530 | ±100PPM | -40 ~ +125 | 2.000 ~ 48.000 | | | |
| 550B-Frequency-xxxxx | FA535R | ±50PPM | -40 ~ +85 | 2.000 ~ 135.000 | | | |
| 476B-Frequency-xxxxx | FA535 | ±50PPM | -40 ~ +125 | 2.000 ~ 48.000 | | | |
| 636B-Frequency-xxxxx | FA536R | ±25PPM | -40 ~ +85 | 2.000 ~ 135.000 | | | |

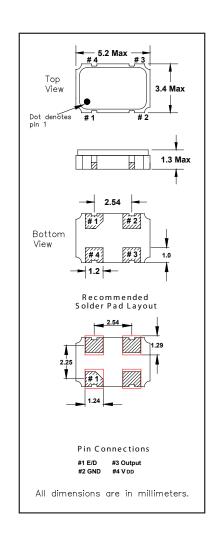
| • ELECTRICAL CHARACTE | RISTICS |
|--|------------------------------|
| PARAMETERS | MAX (unless otherwise noted) |
| Frequency Range (Fo) | see chart above |
| Storage Temperature Range (Tstg) | -55°C ~ +150°C |
| Supply Voltage (VDD) | 3.3V ±10% |
| Input Current (IDD) | |
| 2.000 ~ 19.999999 MHz | 7mA |
| 20.000 ~ 31.999999 MHz | 12mA |
| 32.000 ~ 49.999999 MHz | 20mA |
| 50.000 ~ 79.999999 MHz | 25mA |
| 80.000 ~ 99.999999 MHz | 30mA |
| 100.000 ~ 135.000 MHz | 40mA |
| Output Symmetry (50% VDD) | $40\% \sim 60\%^3$ |
| Rise/Fall Time (10% ~ 90% VDD LEVELS) | |
| 2.000 ~ 49.999999 MHz | 10nS |
| 50.000 ~ 79.999999 MHz | 8nS |
| 80.000 ~ 99.999999 MHz | 5nS |
| 100.000 ~ 135.000 MHz | 4nS |
| Output Voltage (Vol.) | 10% Vdd |
| (Voh) | 90% VDD Min |
| Output Current (IoL) | 2mA Min |
| (Ioh) | -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 ran | |



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

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 ≥ 80% Vdd | ACTIVE | | | | |
| '0' Level VIL ≤ 20% VDD | High Z | | | | |

³ 45/55 symmetry available on an inquiry basis.

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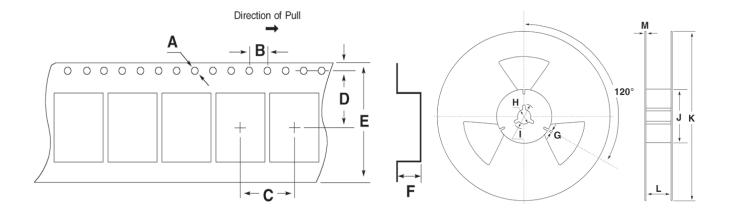
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| Model: | FA530 | SER | IΕS |
|-------------|-------|-----|-----|
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| TAPE SPECIFICATIONS (millimeters) | | | | | | | |
|-----------------------------------|------|-----|-----|-----|------|-----|--------------|
| MODEL | Α | В | С | D | Е | F | STD Reel QTY |
| FA530 Series | Ø1.5 | 4.0 | 8.0 | 5.5 | 12.0 | 1.5 | 1,000 |

| REEL SPECIFICATIONS (millimeters) | | | | | | | |
|-----------------------------------|-----|-----|-------------|-----|------|------|-----|
| MODEL | G | Н | I | J | K | L | M |
| FA530 Series | 2.0 | Ø13 | Ø 21 | Ø62 | Ø180 | 13.5 | 2.0 |



PRODUCT USE

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.