

Data Sheet

Customer : _____

Product : Miniature SMD Type / MHz Band Crystal Oscillators
HQCO Series

Size : 7050 / 5032 / 3225 / 2520 / 2016

Issued Date : 01-Oct.-2025

Edition : Ver.1

Record of change

Date	Ver.	Description	Page

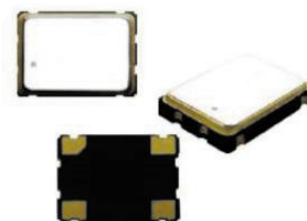
HITANO ENTERPRISE CORP.

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Prepared by	Checked by	Approved by	Accepted by (customer)
01-Oct.-2025	01-Oct.-2025	01-Oct.-2025	
Randy Yu	Michelle Lin	Arthur Su	

- Supply voltage range: 1.8V~5V
- Ultra Small SMD seam sealed clock crystal oscillator units
- Designed for automatic mounting and reflow soldering
- High stability, low jitter, low power consumption

Applications: WLAN, Bluetooth, CCD, GPS and other IT product

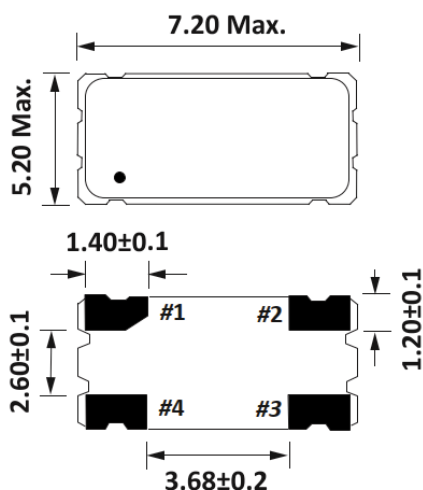


Oscillators SMD
7050 Series

Electrical Specifications

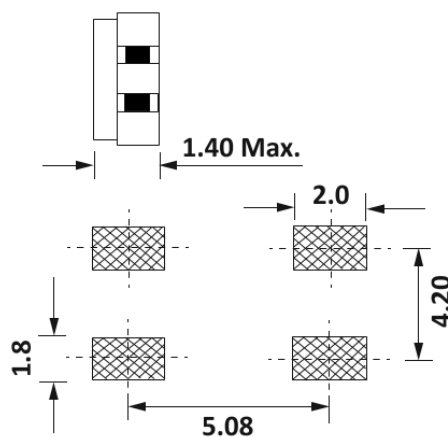
Model	7050
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V / 2.5V / 2.8V / 3.3V / 5V
Frequency Range	1 ~ 156MHz
Frequency Stability	±25ppm, ±50ppm
Operating Temperature Range	-10°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C
Voltage Vol (Max.) / Voh (Min.)	0.1VDD / 0.9VDD
Rise (Tr)/ Fall (Tf) Time	10ns(1~10MHz), 7ns(20~50MHz), 5ns(>50MHz)Max.
Supply Current	45mA Max.
Symmetry	40% ~ 60%
Start-up Time	10ms Max.
Phase Jitter (12 KHz - 20 MHz)	3ps Max.
Aging (at 25°C)	±3ppm / year Max.

Dimensions : Unit mm

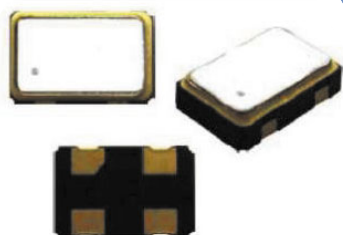


#1 : E/D #2 : GND
#4 : VDD #3 : OUTPUT

Bottom



Suggested Pads



Oscillators SMD
5032 Series

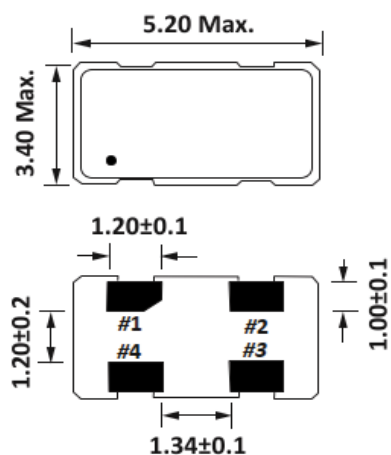
- Supply voltage range: 1.8V~5V
- Ultra Small SMD seam sealed clock crystal oscillator units
- Designed for automatic mounting and reflow soldering
- High stability, low jitter, low power consumption

Applications: WLAN, Bluetooth, CCD, GPS and other IT product

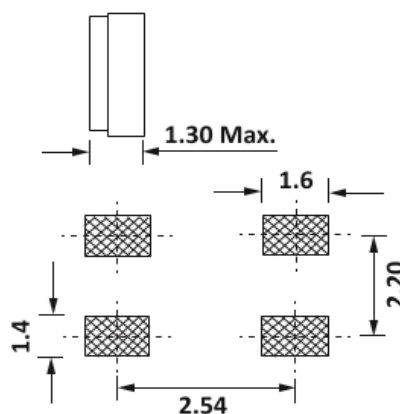
Electrical Specifications

Model	5032
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V / 2.5V / 2.8V / 3.3V / 5V
Frequency Range	1.5 ~ 127MHz
Frequency Stability	±25ppm, ±50ppm
Operating Temperature Range	-10°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C
Voltage Vol (Max.)/ Voh (Min.)	0.1VDD / 0.9VDD
Rise (Tr)/ Fall (Tf) Time	10ns Max.
Supply Current	45mA Max.
Symmetry	40% ~ 60%
Start-up Time	5ms Max.
Phase Jitter (12 KHz - 20 MHz)	3ps Max.
Aging (at 25°C)	±3ppm / year Max.

Dimensions : Unit mm



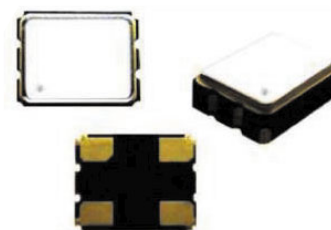
#1 : E/D #2 : GND
#4 : VDD #3 : OUTPUT
Bottom



Suggested Pads

- Supply voltage range: 1.8V~3.3V
- Ultra Small SMD seam sealed clock crystal oscillator units
- Designed for automatic mounting and reflow soldering
- High stability, low jitter, low power consumption

Applications: WLAN, Bluetooth, CCD, GPS and other IT product

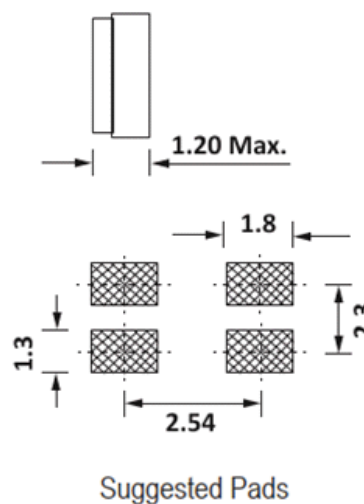
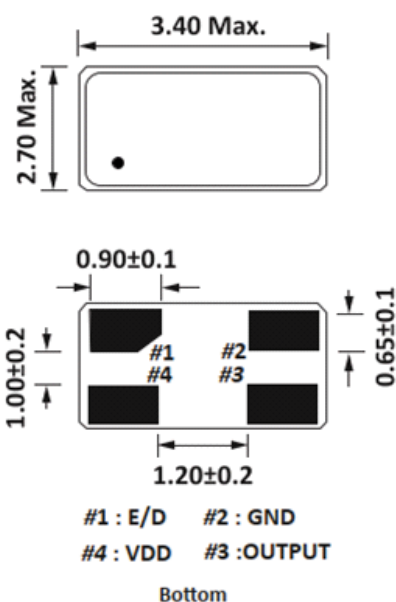


Oscillators SMD
3225 Series

Electrical Specifications

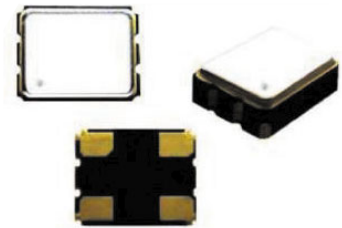
Model	3225
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V / 2.5V / 2.8V / 3.3V
Frequency Range	1 ~ 75MHz
Frequency Stability	±25ppm, ±50ppm
Operating Temperature Range	-10°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C
Voltage Vol (Max.) / Voh (Min.)	0.1VDD / 0.9VDD
Rise (Tr) / Fall (Tf) Time	8ns Max.
Supply Current	15mA Max.
Symmetry	40% ~ 60%
Start-up Time	5ms Max.
Phase Jitter (12 KHz - 20 MHz)	2ps Max.
Aging (at 25°C)	±3ppm / year Max.

Dimensions : Unit mm



- Supply voltage range: 1.8V~3.3V
- Ultra Small SMD seam sealed clock crystal oscillator units
- Designed for automatic mounting and reflow soldering
- High stability, low jitter, low power consumption

Applications: WLAN, Bluetooth, CCD, GPS and other IT product

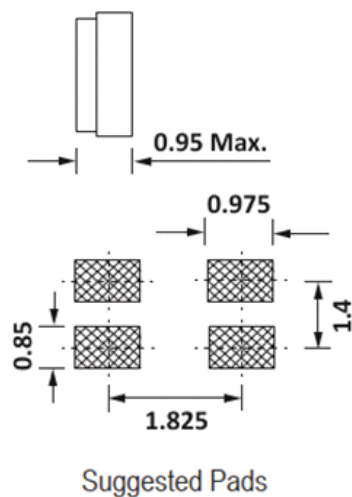
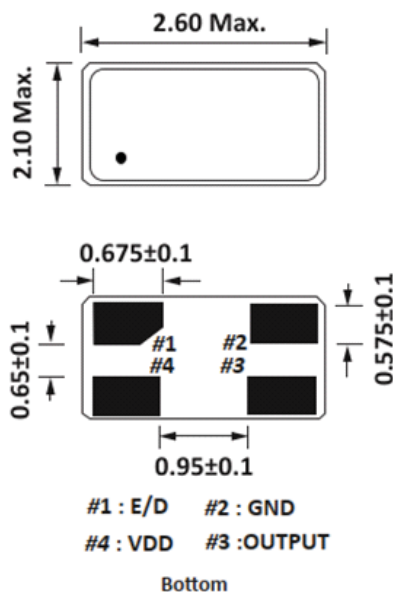


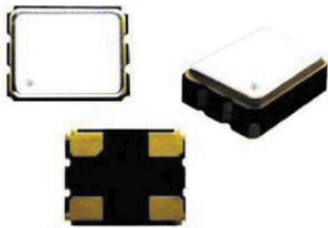
Oscillators SMD
2520 Series

Electrical Specifications

Model	2520
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V / 2.5V / 3.3V
Frequency Range	4 ~ 100MHz
Frequency Stability	±25ppm, ±50ppm
Operating Temperature Range	-10°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C
Voltage Vol (Max.) / Voh (Min.)	0.1VDD / 0.9VDD
Rise (Tr)/ Fall (Tf) Time	10ns Max.
Supply Current	10mA Max.
Symmetry	40% ~ 60%
Start-up Time	10ms Max.
Phase Jitter (12 KHz - 20 MHz)	2ps Max.
Aging (at 25°C)	±3ppm / year Max.

Dimensions : Unit mm





Oscillators SMD
2016 Series

- Supply voltage range: 1.8V~3.3V
 - Ultra Small SMD seam sealed clock crystal oscillator units
 - Designed for automatic mounting and reflow soldering
 - High stability, low jitter, low power consumption
- Applications: WLAN, Bluetooth, CCD, GPS and other IT product

Electrical Specifications

Model	2016
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V / 2.5V / 3.3V
Frequency Range	1 ~ 50MHz
Frequency Stability	±25ppm, ±50ppm
Operating Temperature Range	-10°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C
Voltage Vol (Max.) / Voh (Min.)	0.1VDD / 0.9VDD
Rise (Tr)/ Fall (Tf) Time	10ns Max.
Supply Current	10mA Max.
Symmetry	40% ~ 60%
Start-up Time	10ms Max.
Phase Jitter (12 KHz - 20 MHz)	2ps Max.
Aging (at 25°C)	±3ppm / year Max.

Dimensions : Unit mm

