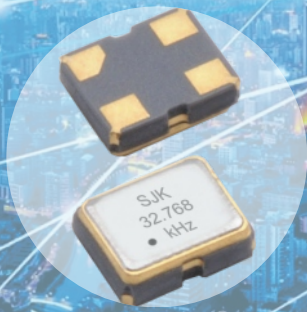




深圳市晶科鑫实业有限公司

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32.768kHz Crystal Oscillator

2D Series SMD 2520 KHz Crystal Oscillator	2
3C Series SMD 3225 KHz Crystal Oscillator	3
5B Series SMD 5032 KHz Crystal Oscillator	4
7A Series SMD 7050 KHz Crystal Oscillator	5

32.768kHz SMD Crystal Oscillator

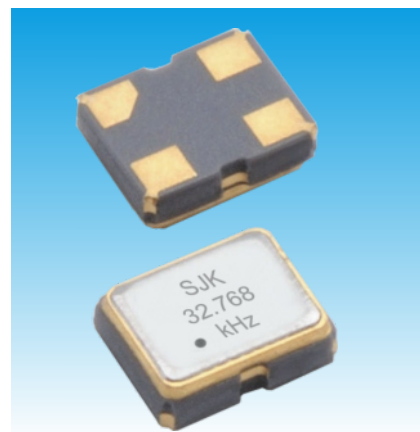


Size: 2.5×2.0×0.80 mm

2D Series 32.768kHz SMD 2520 Oscillator

Features

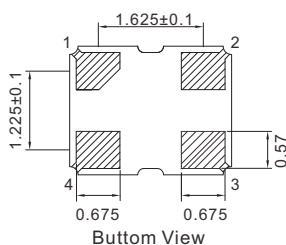
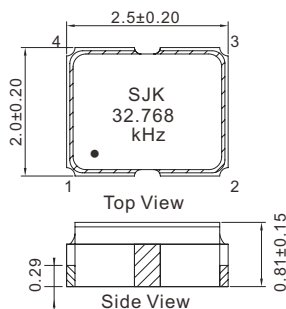
- 2520 size, 0.8mm high
- Operation voltage: 1.8V, 2.5V, 3.3V
- Built-in ASIC enables reduction of current consumption
- 3-state function available
- Automatic mounting and reflow soldering
- Applications: RTC application, DSC, HDTV, Car navigation, IoT, etc
- RoHS Compliant /Pb Free



Standard Specification

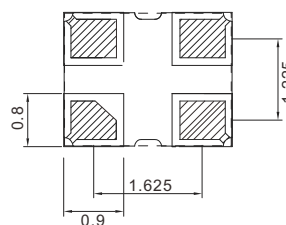
Item /Type	2D (32.768kHz SMD 2520 Oscillator)
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	3.3V
Nominal Frequency	32.768kHz
Supply Current	70mA Max.
Frequency Stability	±20ppm~±50ppm, or specify
Operating Temperature	-40~+85°C, or specify
Storage Temperature	-55~+125°C
Voltage Vol (Max.) /Voh (Min.)	0.1 Vcc /0.9Vcc
Rise (Tr) /Fall (Tf) Time	50ns Max.
Start-up Time	2ms Max.
Duty Cycle	45~55%
3-state Voltage Vol (Max.) /Voh (Min.)	0.3Vcc /0.7Vcc
Packing Unit	3000pcs./Reel

Dimensions [mm]



Pin Connections

Pin No.	Connection
1	OE
2	GND
3	Output
4	Vcc



Top View Suggested Layout

32.768kHz SMD Crystal Oscillator

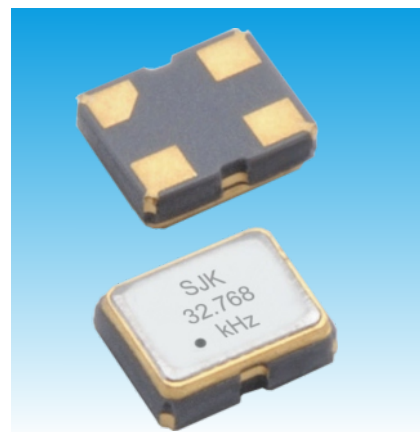


Size: 3.2×2.5×1.00 mm

3C Series 32.768kHz SMD 3225 Oscillator

Features

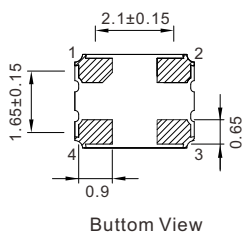
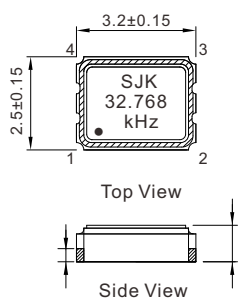
- 3225 size, 0.95mm high
- Operation voltage: 1.8V, 2.5V, 3.3V
- Built-in ASIC enables reduction of current consumption
- 3-state function available
- Automatic mounting and reflow soldering
- Applications: RTC application, DSC, HDTV, Car navigation, IoT, etc
- RoHS Compliant /Pb Free



Standard Specification

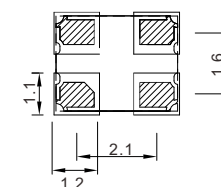
Item /Type	3C (32.768kHz SMD 3225 Oscillator)
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V, 2.5V, 3.3V
Nominal Frequency	32.768kHz
Supply Current	70mA Max.
Frequency Stability	±20ppm~±50ppm, or specify
Operating Temperature	-40~+85°C, or specify
Storage Temperature	-55~+125°C
Voltage Vol (Max.) /Voh (Min.)	0.1 Vcc /0.9Vcc
Rise (Tr) /Fall (Tf) Time	50ns Max.
Start-up Time	2ms Max.
Duty Cycle	45~55%
3-state Voltage Vol (Max.) /Voh (Min.)	0.3Vcc /0.7Vcc
Packing Unit	3000pcs./Reel

Dimensions [mm]



Pin Connections

Pin No.	Connection
1	OE
2	GND
3	Output
4	Vcc



Top View Suggested Layout

32.768kHz SMD Crystal Oscillator

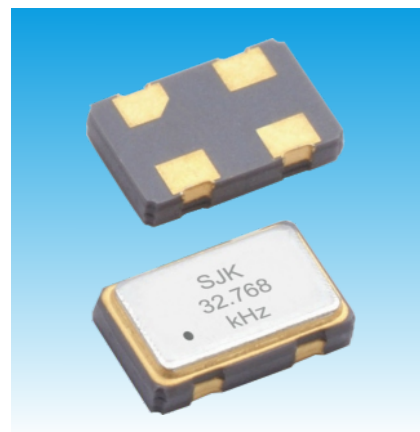


Size: 5.0×3.2×1.20 mm

5B Series 32.768kHz SMD 5032 Oscillator

Features

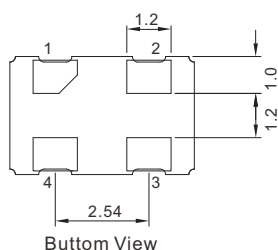
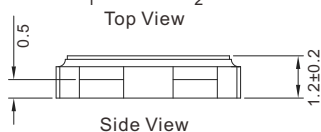
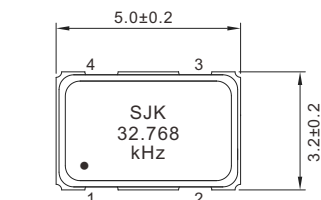
- 5032 size, 1.2mm high 32.768kHz SPXO
- Operation voltage: 1.8V, 2.5V, 3.3V
- Built-in ASIC enables reduction of current consumption
- 3-state function available
- Automatic mounting and reflow soldering
- Applications: RTC application, DSC, HDTV, Car navigation, IoT, etc
- RoHS Compliant /Pb Free



Standard Specification

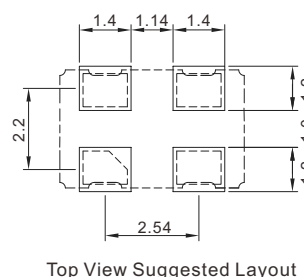
Item /Type	5B (32.768kHz SMD 5032 Oscillator)
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V, 2.5V, 3.3V
Nominal Frequency	32.768kHz
Supply Current	100µA Max.
Frequency Stability	±20ppm~±100ppm, or specify
Operating Temperature	-40~+85°C, or specify
Storage Temperature	-55~+125°C
Voltage Vol (Max.) /Voh (Min.)	0.1 Vcc /0.9Vcc
Rise (Tr) /Fall (Tf) Time	12ns Max.
Start-up Time	5ms Max.
Duty Cycle	45~55%
3-state Voltage Vol (Max.) /Voh (Min.)	0.3Vcc /0.7Vcc
Aging (at 25°C)	±3ppm/Year Max.
Packing Unit	1000pcs./Reel

Dimensions [mm]



Pin Connections

Pin No.	Connection
1	OE
2	GND
3	Output
4	Vcc



32.768kHz SMD Crystal Oscillator

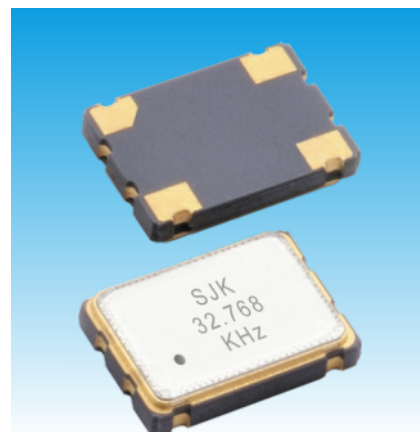


Size: 7.0×5.0×1.30 mm

7A Series 32.768kHz SMD 7050 Oscillator

Features

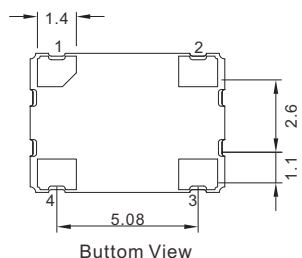
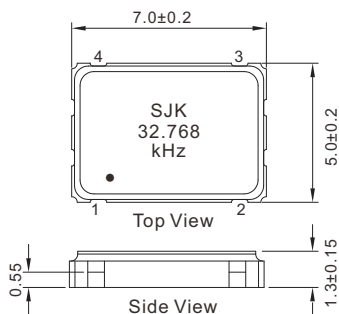
- 7050 size, 1.3mm high 32.768kHz SPXO
- Operation voltage: 1.8V, 2.5V, 3.3V
- Built-in ASIC enables reduction of current consumption
- 3-state function available
- Automatic mounting and reflow soldering
- Applications: RTC application, DSC, HDTV, Car navigation, IoT, etc
- RoHS Compliant /Pb Free



Standard Specification

Item /Type	7A (32.768kHz SMD 7050 Oscillator)
Output Type	CMOS
Output Load	15pF, or specify
Supply Voltage	1.8V, 2.5V, 3.3V
Nominal Frequency	32.768kHz
Supply Current	100μA Max.
Frequency Stability	±20ppm~±100ppm, or specify
Operating Temperature	-40~+85°C, or specify
Storage Temperature	-55~+125°C
Voltage Vol (Max.) /Voh (Min.)	0.1 Vcc /0.9Vcc
Rise (Tr) /Fall (Tf) Time	12ns Max.
Start-up Time	5ms Max.
Duty Cycle	45~55%
3-state Voltage Vol (Max.) /Voh (Min.)	0.3Vcc /0.7Vcc
Aging (at 25°C)	±3ppm/Year Max.
Packing Unit	1000pcs./Reel

Dimensions [mm]



Pin Connections

Pin No.	Connection
1	OE
2	GND
3	Output
4	Vcc

