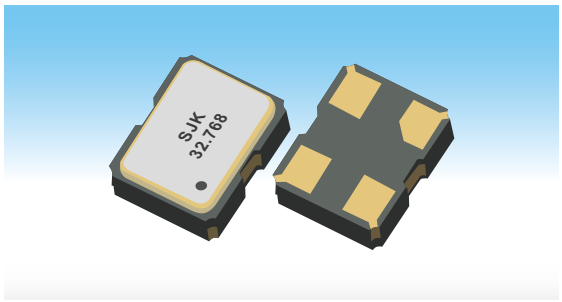
SMD 32.768kHz Crystal Oscillators

2E Series SMD 2016 32.768kHz Crystal Oscillator 32.768kHz O: CMOS Size: 2.0×1.6×0.7mm



Actual size

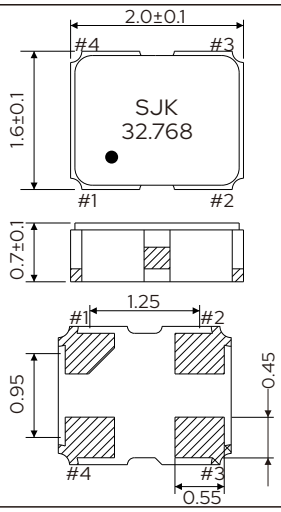
Features

- 2016 size, 0.7mm high. Ultra miniature and lightweight SMD 32.768kHz crystal oscillators
- 3-state function
- Supply voltage: 1.8V~3.3V
- 32.768kHz reference frequency output
- Low jitter provides for high performance
- Application for RTC reference clock, Wearable device, Mobile phone, Sport video cams, Health and wellness monitors, etc
- RoHS Compliant / Pb Free

Standard Specifications

Item / Type	2E Series SMD 2016 32.768kHz Crystal Oscillator
Output Type	CMOS
Load condition	15pF, or specify
Frequency Range	32.768kHz
Supply Voltage	1.8V~3.3V
Frequency Stability (All Condition)	±20ppm, ±25ppm, ±30ppm, ±50ppm, or specify
Current Consumption	35μA max.
Stand-by Current	3μA max.
Symmetry	45~55%
0 Level Output Voltage (V_{OL})	0.1 Vcc max.
1 Level Output Voltage (V_{OH})	0.9 Vcc min.
Rise Time / Fall Time	15ns max.
OE Pin 0 Level Input Voltage (V_{IL})	0.2Vcc max.
OE Pin 1 Level Input Voltage (V_{IH})	0.8Vcc min.
Start-up Time	5ms max.
Operating Temperature Range	-20~+70°C, -40~+85°C, or specify
Storage Temperature Range	-55~+125°C
Phase Jitter (12KHz~20MHz)	1ps max.

Dimensions

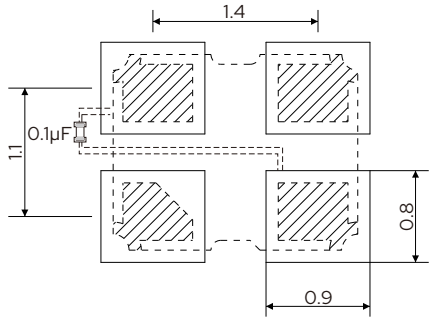


Pin Connections

Pin No.	Connection
#1	OE (Output Enable)
#2	GND
#3	Output
#4	Vcc

Functions

#1 input	#3 output condition
H	Oscillation out
Open	Oscillation out
L	High Z

Recommended Land Pattern [mm]

Top View