


- This parts does not contain any hazardous substances as specified in the RoHS (The restriction of the use of certain hazardous substances)
- P/N : SCO323350ADSR-12M
- Requirements

	Items	Specifications
1	Nominal Frequency	12.000000 MHz
2	Model Name	SCO-32
3	Dimension	See drawing
4	Operating Temperature range	-40~85°C
5	Storage temperature range	-55~125°C
6	Frequency Tolerance / Stability (in operating temperature range)	± 50 ppm max.
7	Supply voltage(V _{DD})	1.8~3.3 VDC±5%.
8	Input Current(consumption current)	25 mA max.
9	Rising/Falling time(Tr/Tf)	2 ns max.
10	Symmetry(Output duty cycle)	45:55 %
11	Aging in a year	± 3 ppm / year
12	Enable/Disable function on pin 1	available
13	Output Loads (CMOS)	CL=15pF
14	Marking	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p style="text-align: center;">12.000 S YWW</p>  </div>

■ Application Note

Please do not connect inductor or bead between power supply and VDD(#4 pad).

It can make output oscillation unstable.

Please connect bypass capacitor 0.1 μ F or 0.01 μ F between VDD(#4 pad) and circuit ground.

Please connect #1 pad to Vcc(#4 pad), if Enable/Disable function of #1 isn't used.

■ Storage condition of SMD products in the room temperature

Temperature : 25±3°C, Humidity: 35±10%(RH)

■ Storage period

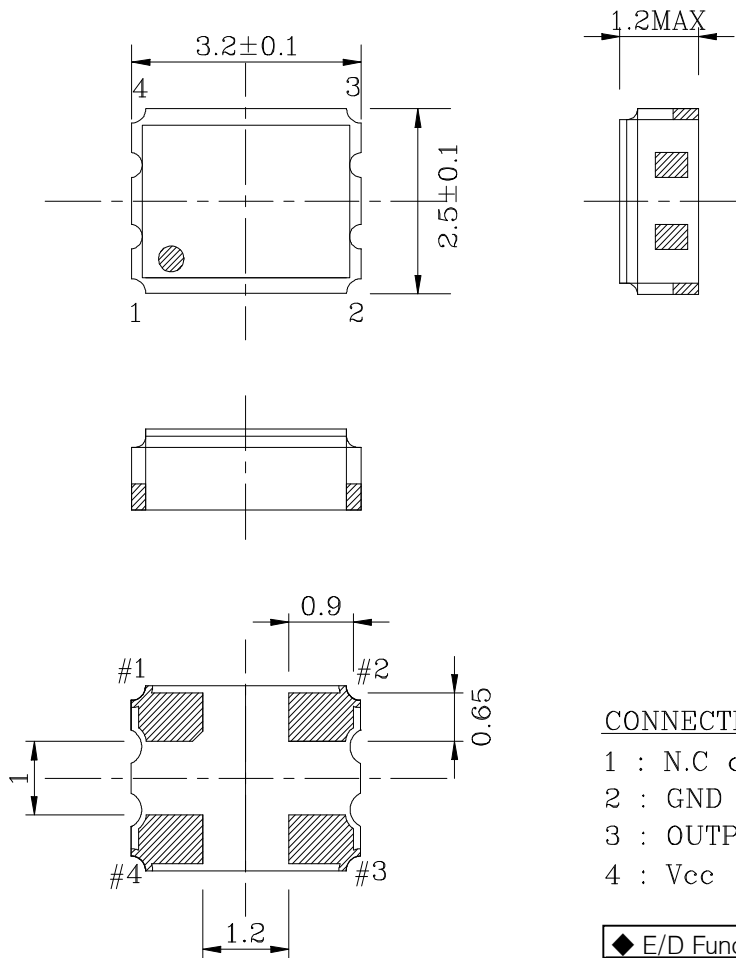
It is recommended that Storage period of SMD products for Bulk and T & R be within 6 months and 12 months, respectively.

■ Electrostatic Discharge (ESD) Precaution

SMD Oscillators are ESD-sensitive devices. The work surface where devices are placed for handling, processing, testing, etc., must, be made of static-dissipative material and be grounded to ESD ground.

SCO-32 Dimension

Dimension (Unit : mm)



CONNECTION

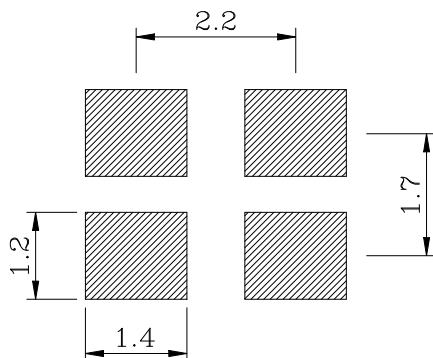
- 1 : N.C or EN/DIS(Tri-State)
- 2 : GND
- 3 : OUTPUT
- 4 : Vcc

◆ E/D Function	
Condition on Pin 1	Output
$\geq 0.7V_{cc}$	Enable
$\leq 0.3V_{cc}$	Disable
N.C	Enable

Note)

Please connect #1 pad to Vcc(#4 pad), if don't use Enable/Disable function of #1.

Recommended Soldering Pattern (Unit : mm)

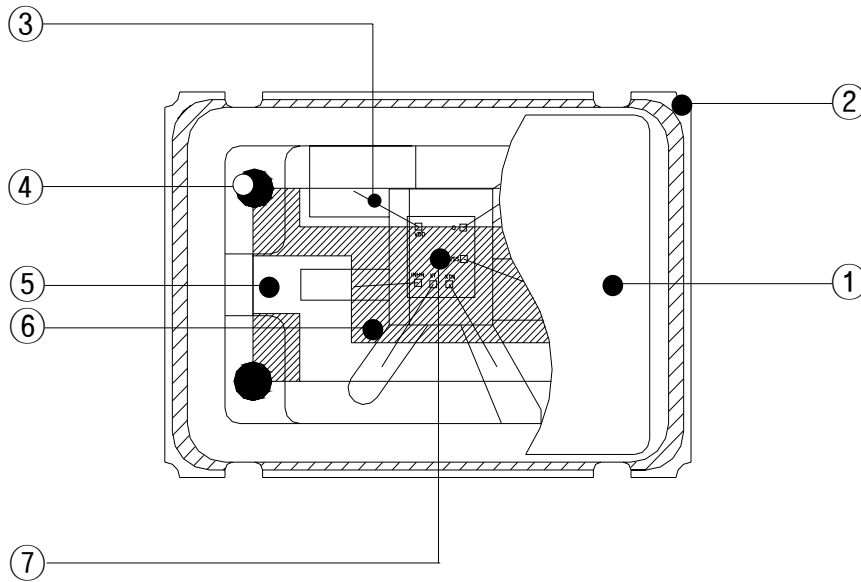


Note)

Please connect bypass capacitor $0.1\mu F$ or $0.01\mu F$ between Vcc(#4 pad) and circuit ground.

SCO-32 Structure illustration & Component

■ Structure illustration



■ Component

	Component	Materials and Finish
	Lid	Kovar
	Package	Al ₂ O ₃
	Gold Wire	Au
	Epoxy	Silicon
	Synthetic Quartz	SiO ₂
	Electrode	Ag
	IC	Silicon