

## ACT634SMX-2

The ACT634SMX-2 family is a low cost, 2 pad, high quality, low aging 6x3.5mm SMD Crystal in a ceramic base / metal lid package. The wide frequency range and specification options ensure suitability for many applications.

**APPLICATIONS:** Wireless, Audio-visual, ATM, Cordless Phones, Pagers, Micro clock, Notebook, Instrumentation, Office automation, Audio-visual, Process Control, Consumer & Communications.



### Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	10.0 ~ 48.0MHz	Please specify
Frequency Tolerance (@25°C)	Δf/fo	±30 & ±50ppm	Or specify
Stability over temp range	Tc	±50ppm -20~+70°C	Standard (table 2)
		±30ppm -10~+60°C	Standard (table 2)
Temp Operating Range	Topr	0~+50°C ~ -40~+85°C	Please specify
Temp Storage Range	Tstg	-55 ~+125°C	
Equivalent Series Resistance	ESR	See table 1	
Load Capacitance	CL	9pF ~ 20pF & Series	Or specify
Shunt Capacitance	C0	5pF max	
Drive Level	DL	10 ~ 100 μW	(Custom to 200μW available - Enquire)
Drive Level Dependency	DLD	ESR min to max <1.3	0.01, 0.1, 1, 10, 50, 100μW steps
		FL min to max <1.3	
Insulation Resistance	IR	500MΩ min	@100V DC
Aging	Fa	±5ppm p/year (±3ppm available)	(First year max @ 25°C)

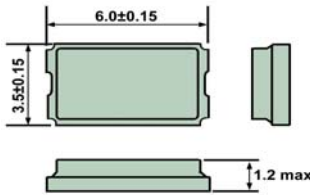
Table 1

Freq. Range (MHz)	ESR (Ω) max	Mode / Cut
10.000 ~ 12.999	80	Fundamental / AT
13.000~ 19.999	50	Fundamental / AT
20.000~30.000	40	Fundamental / AT
>20MHz	40	Fundamental / BT
30.000~48.000	80	3 <sup>RD</sup> Overtone / AT

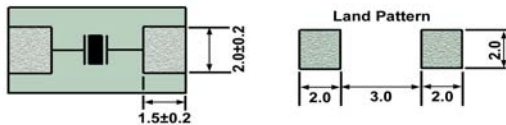
Table 2

Temperature	Frequency Stability (ppm)		
	±20	±30	±50
-10~+60°C	✓	STD	✓
-10~+70°C	✓	✓	✓
-20~+70°C	✓	✓	STD

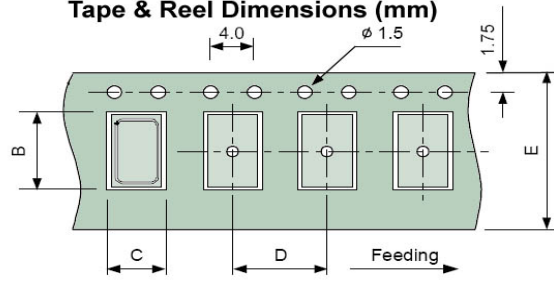
Pad Surface Material: Gold (Au)



### Dimensions (mm)

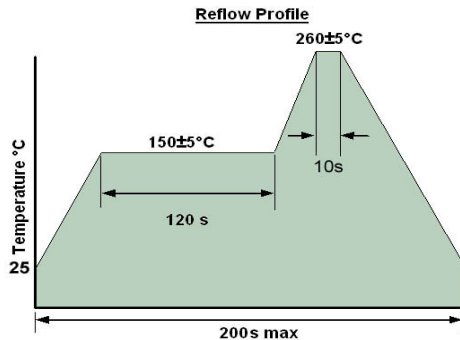


### Tape & Reel Dimensions (mm)



A	B	C	D	E	L	L1	W	W1
1.4	6.4	3.9	8.0	12	180	13	15.4	13

Standard reel quantity 1K pieces



Please note that all parameters can not necessarily be specified in the same device

Customer to specify : Frequency, Frequency Tolerance, Temperature Stability, Operating Temperature & Load Capacitance  
 In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

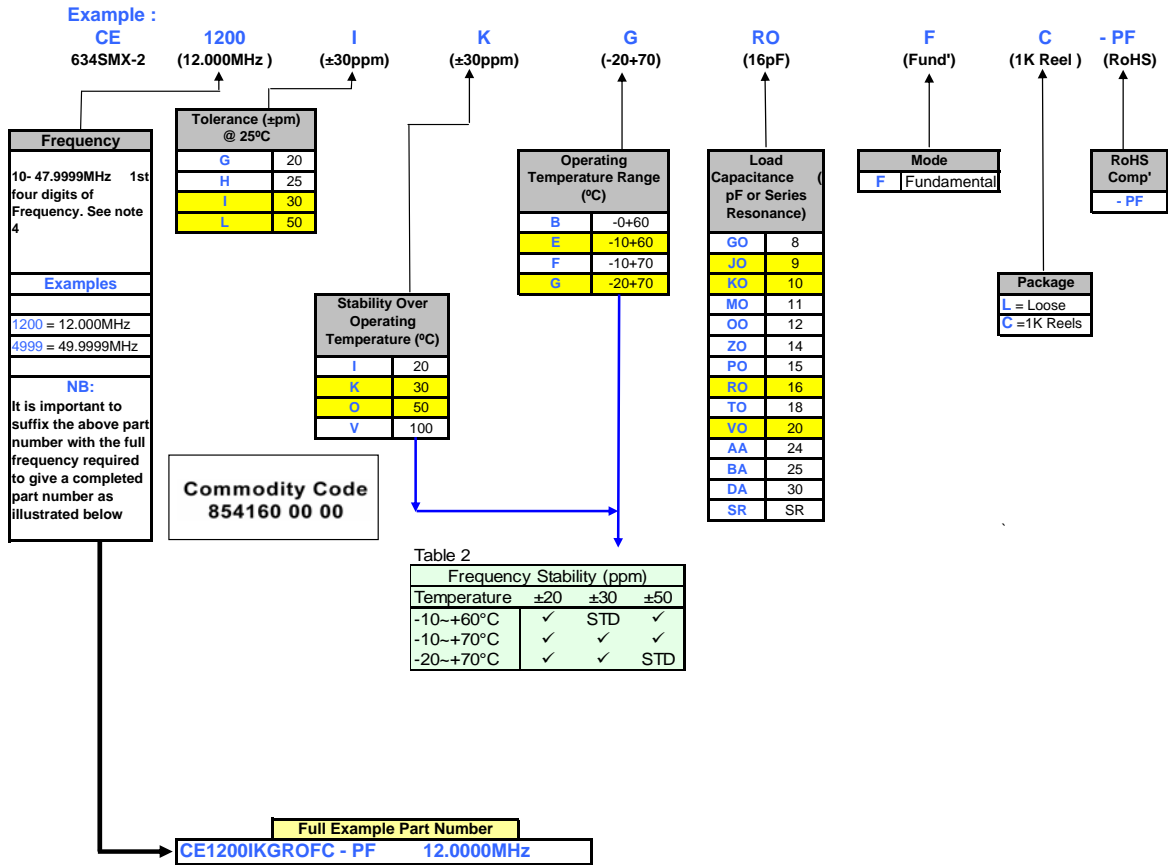
ISO9001:2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

**SERIES : ACT634SMX-2 Part numbering code is CE**



**NOTES :**

- 1) Tighter Tolerances and Stabilities and other Operating Temperature Ranges may be available.
- 2) ACT are always happy to consider truly custom specification parts which may require non-standard specification parameters, specific testing, customer requested AQL requirements, non standard packaging or taping and reeling and custom marking. Such devices  
( EG : A 12.00MHz custom ACT634SMX-2 device may have a part number such as CE1200C- C1122-PF)
- 3) A guide to availability of tighter stabilities appears on page one of this data sheet in Table 2
- 4) Frequencies below 10.000MHz are prefixed with a "0" (eg: 0900 = 9MHz. Whereas 10.000MHz is 1000 )