

XSD & XSE Type

49SMD 2Pin X'TAL Series

Feature

- ◆ Frequency Range: 3.58~80MHz
- ◆ Typical 12.5 x 4.5 x 4.2 (3.2) mm metal can 3pin SMD package.
- ◆ 24mm width Carrier tape & Reel package for automatic assembly.
- ◆ Packing : Tape & Reel, 1000pcs / Reel or 2000pcs / Reel.

Typical Application

- ◆ Automotive
- ◆ Bluetooth, Wireless
- ◆ Computers, Modems, Communications.
- ◆ Set-top Box, DECT / WDCT, TV.



Electrical Specifications

Parameter	Specification			Unit	Remark
	Min	Typical	Max		
Frequency Range (F0)	3.58~80			MHz	-
Storage Temperature Range (Ts)	-55	-	125	°C	-
Level of Drive (DL)	-	100	200	uW	-
Load Capacitance (CL)	6 pF ~ ∞			pF	Assignable
Insulation Resistance	500	-	-	Mohm	at DC 100V
Aging	-3	-	3	ppm/Year	First Year

Frequency Stability Vs Temperature Range

Temp Range(°C)	ppm						
	±5	±10	±15	±20	±30	±50	±100
-10~50	△	√	√	√	√	√	√
-20~70	X	√	√	√	√	√	√
-40~85(F>=16MHz)	X	X	△	√	√	√	√
-40~85(F<16MHz)	X	X	△	△	√	√	√
-40~105	X	X	X	X	△	√	√
-40~125	X	X	X	X	X	△	√

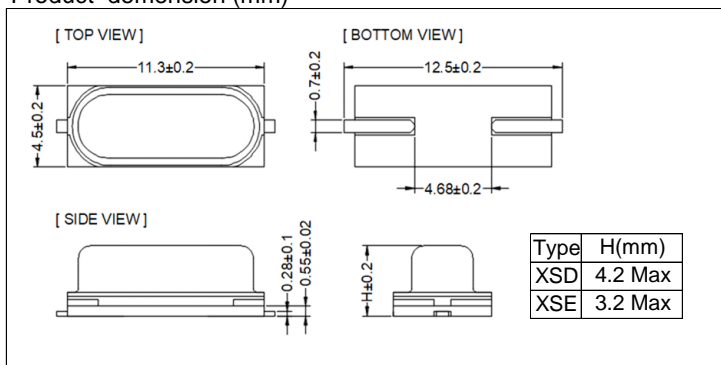
Note: √ :Available, △:Conditional, X:Not available

ESR (Equivalent Series Resistance)

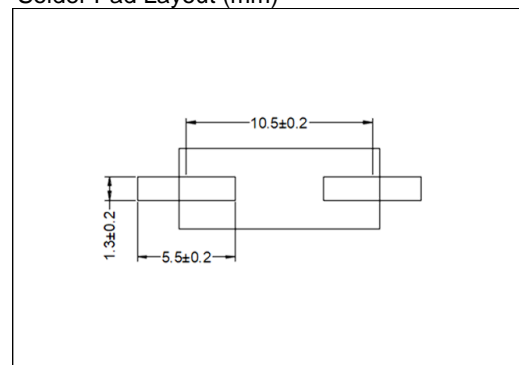
Frequency Range	Mode	ESR (Max)	Unit	Remark
3.58MHz < F ₀ < 4MHz	Fundamental	150	ohm	XSD
4MHz ≤ F ₀ < 6MHz	Fundamental	100	ohm	XSD & XSE
6MHz ≤ F ₀ < 10MHz	Fundamental	60	ohm	XSD & XSE
10MHz ≤ F ₀ < 12MHz	Fundamental	60	ohm	XSD & XSE
12MHz ≤ F ₀ < 16MHz	Fundamental	45	ohm	XSD & XSE
16MHz ≤ F ₀ < 20MHz	Fundamental	45	ohm	XSD & XSE
20MHz ≤ F ₀ < 24MHz	Fundamental	40	ohm	XSD & XSE
24MHz ≤ F ₀ < 30MHz	Fundamental	35	ohm	XSD & XSE
30MHz ≤ F ₀ ≤ 48MHz	Fundamental	30	ohm	XSD & XSE
30MHz ≤ F ₀ < 36MHz	3rd Overtone	70	ohm	XSD & XSE
36MHz ≤ F ₀ < 80MHz	3rd Overtone	50	ohm	XSD & XSE

Dimension

Product dimension (mm)



Solder Pad Layout (mm)



Note: not all combination of options are available. Other specifications may be available upon request.

Specifications subject to change without notice.