



Features

“AT” Strip Blank Technology
Cost Effective
High Stability with Temperature
Wide Frequency Range
Excellent Reliability
Low Profile
Excellent Aging Characteristics



Specifications

Type		46S/46SMD & 46S/46SMD-3P
频率范围	Frequency Range	8.000~50.000MHz
振动模式	Vibration Mode	ATcut,Fundamental
调整频差 (ppm)	Frequency Tolerance (at 25°C)	± 10~ ± 50ppm
温度频差 (ppm)	Frequency Stability Over Temperature Range	See Table 1
储存温度 (°C)	Storage Temperature Range	-40°C~+85°C
等效电阻 (Ω)	Equivalent Series Resistance	See Table 2
静态电容 (pF)	Shunt Capacitance	5.0pFMax
负载电容 (pF)	Load Capacitance	5~50pF or Series Resonance
绝缘电阻 (MΩ)	Insulation Resistance	≥500MΩ //DC100V ± 10V
激励功率 (μW)	Drive Level	0.01 μW~1000 μW
老化率 (ppm/y)	Aging	± 2ppm/year, ± 3ppm/year, ± 5ppm/year

All specifications subject change without notice.

Frequency Stability over Temperature Range (AT cut) (Table 1)

Temperature Range		±3ppm	±5ppm	±7ppm	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
		03	05	07	10	15	20	30	50
0~+50°C	A	/	/	/	Δ	Δ	Δ	Δ	Δ
-5~+55°C	B	/	/	/	Δ	Δ	Δ	Δ	Δ
-10~+60°C	C	/	/	/	Δ	Δ	Δ	Δ	Δ
-20~+70°C	D	/	/	/	/	Δ	Δ	Δ	Δ
-30~+85°C	E	/	/	/	/	/	Δ	Δ	Δ
-40~+85°C	F	/	/	/	/	/	/	Δ	Δ
-40~+105°C	G	/	/	/	/	/	/	/	Δ

46S/46SMD & 46S/46SMD-3P

Equivalent Series Resistance (ESR) (Table 2)

Freq.Range(MHz)	Mode of Oscillation	ESR (Ω Max)
8.000~11.999	AT.Fund	80
12.000~15.999	AT.Fund	60
16.000~19.000	AT.Fund	50
20.000~50.000	AT.Fund	40

Options Available

Options Available	Item
✓	Paper tape & reel packing
✓	3 rd in line lead base
✓	Insulator both for 2 leads and 3 leads
✓	Lead cut/Customer lead length options available
✓	Laser marking
✓	Special C ₁ or C ₀ requirement
✓	Special ESR

Dimension (Unit: mm)

