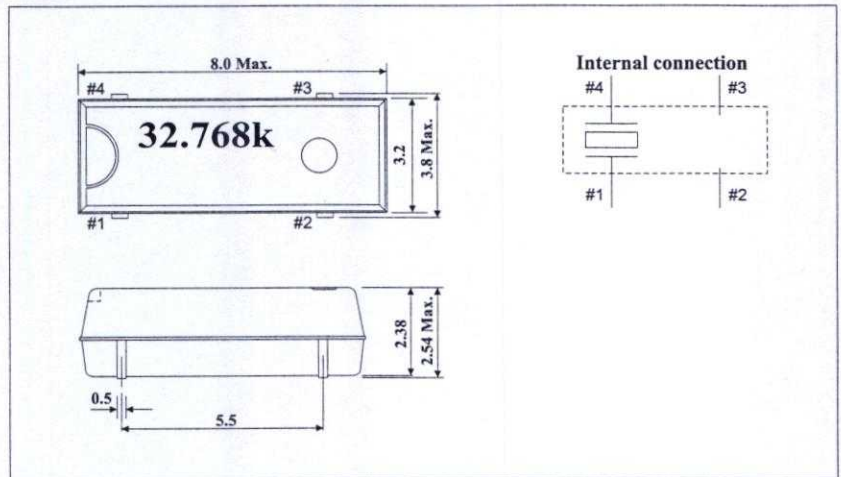
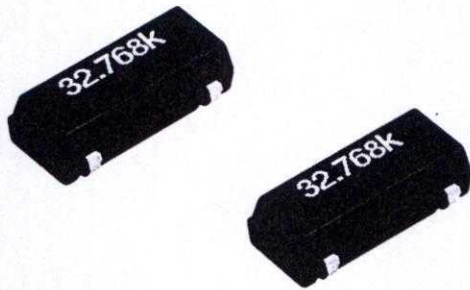


QUARTZ CRYSTAL RESONATOR
石英晶体谐振器
SMD8.0×3.2
⊕ DIMENSIONS (Unit: mm) 外形尺寸


⊙ NOTICE: Do not connect #2 and #3 to external device.

⊕ PART NUMBER GUIDE 部件号示例 e.g. *FTX32.768K12.5SM8 (*SM8=SMD3×8)*

	Quartz Crystal Resonator 石英晶体谐振器	Frequency 频率	Load Capacitance 负载电容	*Package Type 盒形
FT	X	32.768KHz	12.5	-SM8

⊕ PARAMETERS 技术参数

ITEM	SYMBOL	SPECIFICATIONS		REMARKS
Nominal Frequency 标称频率	f	32.768KHz	20.000KHz to 165.000KHz	Stored as bare product after unpacking
Temperature Range 温度范围	Storage Temp. 储存温度	-40°C to +85°C		
	Operating Temp. 工作温度	-10°C to +60°C		
Maximum Drive Level 测试激励电平	GL	1.0 μW max		
Frequency Tolerance (Standard) 调整频差	Δf/f	±50×10 ⁻⁶ , ±50×10 ⁻⁶	±50×10 ⁻⁶ , ±100×10 ⁻⁶	Ta=+25°C DL=0.1 μW
Temperature Coefficient (Frequency) 二次温度曲线系数	a	-0.04×10 ⁻⁶ /°C ² max		
Load Capacitance 负载电容	CL	12.5pF Std.	6pF to ∞	Please specify
Series Resistance 谐振电阻	R ₁	50KΩ max	55KΩ to 10KΩ	
Motional Capacitance 动态电容	C ₁	1.8fF Typ.	4.0fF to 0.6fF	
Shunt Capacitance 静态电容	C ₀	1.9pF Typ.	1.9pF to 0.6pF	
Insulation Resistance 绝缘电阻	IR	500MΩ min		
Aging 老化率	Fa	±3×10 ⁻⁶ /year max	±5×10 ⁻⁶ /year max	Ta=+25°C ±3°C (First Year)

⊙ Metal may be exposed on the top of this product. This won't affect any quality, reliability or electrical spec.

⊕ Series Resistance 谐振电阻

Frequency(KHz)	频率范围	20≤f<30	30≤f<40	40≤f<60	60≤f<70	70≤f<120	120≤f<165
Series Resistance(Ω)	谐振电阻	55KΩ max	45KΩ max	20KΩ max	15KΩ max	12KΩ max	10KΩ max