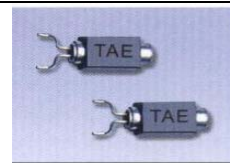


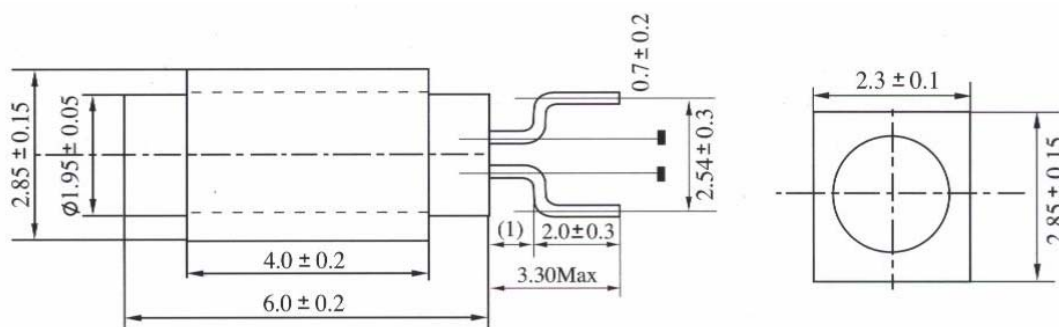
Smd type Tuning Fork Crystal Resonators

● APPLICATIONS

- ▲ Jacket type that realized miniaturization
- ▲ Good for automatic mounting and reflow soldering
- ▲ Suitable for various applications such as mobile telecom equipments



Electronic specifications



Electronic specifications

Parameter	Symb	Units	Typical	Min	Max	Condition
Frequency range	fo	KHz	32.768	30	100	
Frequency tolerance	$\Delta f/fo$	ppm	± 20	± 5	± 100	At 25°C
Temperature coefficient	β	ppm/(°C) ²	-0.034 ± 0.006			
Turnover temperature	T _m	°C	25 ± 5			
Operating temperature range	T _{OPR}	°C	$-10 \sim +60$			
Storage temperature range	T _{STG}	°C	$-40 \sim +85$			
Quality factor			90,000TYP			
Series resistance	R ₁	K Ω	35	20	40	25°C
Shunt capacitance	C ₀	PF	1.35TYP			
Motional capacitance	C ₁	PF	0.0030TYP			
Load capacitance	C _L	PF	12.5	Please specify		
Insulator resistance	IR	M Ω		500		Dc100V ± 15 V
Drive level	KL	μ W			1	
Capacitance ratio	γ		450TYP			
Aging	$\Delta f/fo$	ppm		± 5.0		At 25°C ± 3 °C