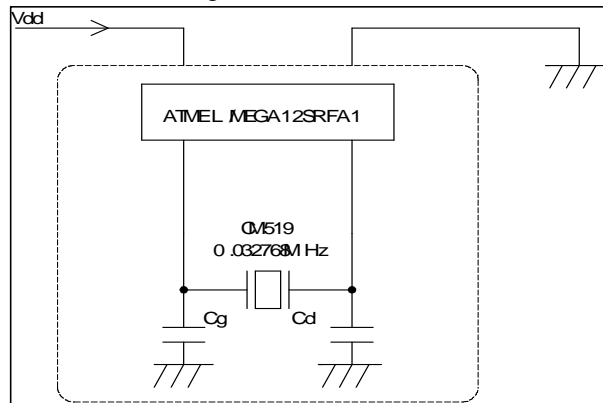


Investigation Report of Oscillation Circuit

*at Vdd=3.0V/25°C

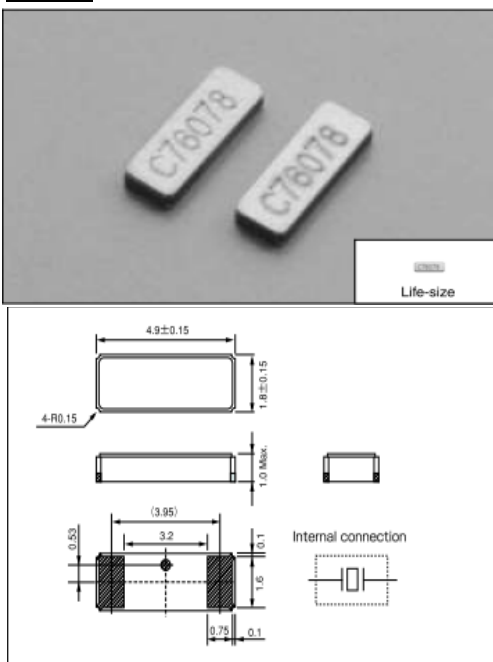
IC		ATMEL	
		MEGA128RFA1	
CRYSTAL		CM519	
Nominal Frequency	kHz	32.7680	
Laod Capacitance	pF	7	
Cg,Cd	pF	12	12
Negative Resistance (-R)	ohm	680k	
Drive Level	μW	0.1	
Startup Time	ms	270	

* Our Recommendable Negative Resistance Value : over 200k ohm



*These recommendations are based on actual evaluation results and intended to support users in picking the right components. As the actual board layout and choice of external components influences the best suitable crystal load capacitance, we does not assume evaluation. Please refer to IC maker's manual for designing.

CM519



TUNING FORK CRYSTAL UNIT		
<ul style="list-style-type: none"> ■ Tuning fork crystal with ceranic packaged type. ■ Small & thin package and light weight. ■ Most appropriate for portable devices and mobile telecommunications devices. 		
Standard Specification		
Nominal Frequency	kHz	32.768
Frequency Tolerance	ppm	+/- 20 (at 25°C)
Operatating Temperature Rang	°C	-40 to 85
Storage Temperature Range	°C	-55 to 125
Motional Resistance	Ω	70k
Level of drive	uW	1 Max.
Insulation Resistance	MΩ	500 Min. (at DC100+/-15V)