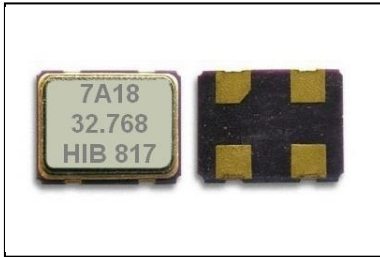


7A Series SMD RTC Oscillator 32.768KHz



FEATURES

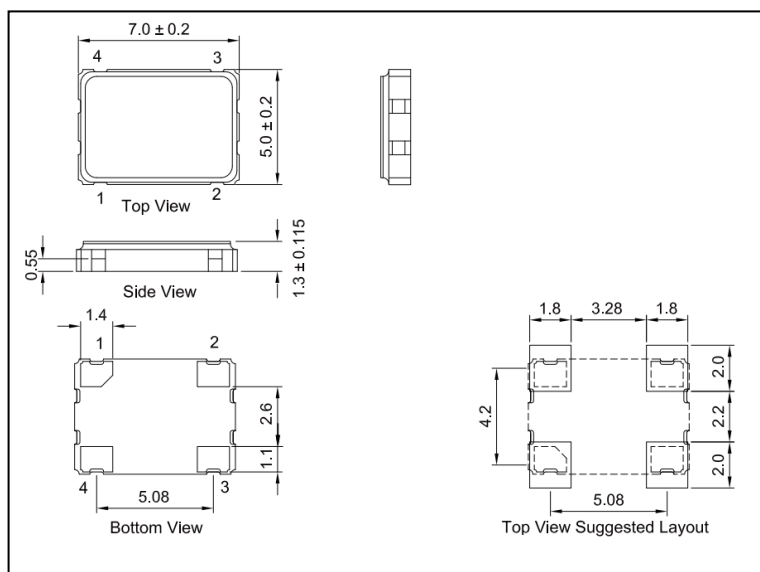
- 5.0x3.2mm, 32.768KHz RTC oscillator in seam sealed ceramic package.
- 4 PADS design to achieve good soldering contact on PCB.
- Tri-state Enable/Disable for power saving.
- Use AT crystal as the resonator for good temperature performance.

Electrical Specifications

Parameter	Symbol	Condition	7A33	7A28	7A18
Frequency Range	F ₀		32.768KHz		
Frequency Stability *		All Condition *	±20PPM, ±50PPM, ±100PPM		
Power Supply Voltage (±10%)	V _{DD}		3.3V	2.8V	1.8V
Operating Temperature Range	T _{OPR}		-20°C to 70°C (-40°C to 85°C option)		
Storage Temperature Range	T _{STG}		-55°C to 125°C		
Aging (first year)		25°C ± 3°C	± 3PPM		
Supply Current	I _{DD}	-	3mA Max		
Output Symmetry	Sym	½ V _{DD}	45/55%		
Rise Time	T _r	10%V _{DD} to 90%V _{DD}	200ns Max		
Fall Time	T _f	90%V _{DD} to 10%V _{DD}	200ns Max		
Output Voltage	V _{OH}		90% V _{DD} Min		
	V _{OL}		10% V _{DD} Max		
Output Load HCMOS Load	---	---	15pF Typ.		
Startup Time	T _s		2ms Max		
Pin 1, tri-state function			Pin 1= High or Open, output active at Pin 3		
			Pin 1= Low, high impedance at Pin 3		

* Include 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

Mechanical Dimensions – mm



Enable/Disable Function	
Input (Pin1)	Output (Pin3)
Open	Enable
High	Enable
Low	Disable

Pin	Connection
1	Tri-state/NC
2	GND
3	Output
4	V _{DD}

**Note: 0.01uF bypass capacitor should be placed between V_{DD} (Pin4) and GND(Pin2) to minimize power supply line noise