



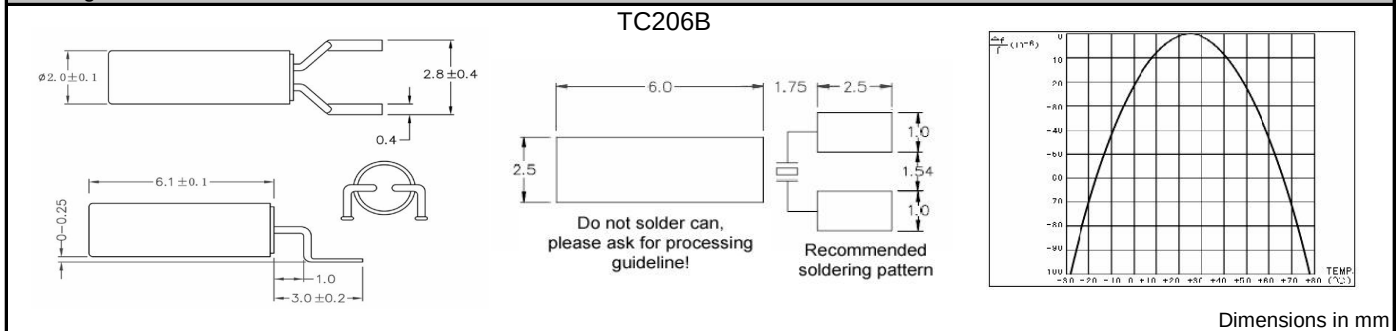
TC206B

Features:

- Surface mount pick & place
- High performance/cost ratio

Specifications				
	Symbol	TC-206B		Remarks
Frequency range	f	32.768kHz	32kHz ~ 200 kHz	
Frequency tolerance, Ta=25°C	$\Delta f/f$	$\pm 10\text{ppm} \sim \pm 100\text{ppm}$		Others are offered
Load capacitance	C_L	12.5pF (Std.)	6pF ~ 12.5pF (Std.)	Please specify
Temp. coefficient	A	$-0.035 \pm 0.01\text{ppm}/^\circ\text{C}^2$		Max
Temperature range	Storage temperature	T_{STG}	$-40^\circ\text{C} \sim +85^\circ\text{C}$	Max (25°C $\pm 5^\circ\text{C}$)
	Operating temperature	T_{OPR}	$-10^\circ\text{C} \sim +60^\circ\text{C} \sim -40^\circ\text{C} \sim +85^\circ\text{C}$	Others are offered
Drive level	Maximum drive level	M_{DL}	1 μW	Max
	Recommended drive level	R_{DL}	-	
Series resistance	R_1	40k Ohm max		As per table (25°C $\pm 3^\circ\text{C}$)
Shunt capacitance	C_0	1.45pF	1.3pF	Typ
Insulation resistance	I_R	500M Ohm		Min
Aging	Δf_A	$\pm 5\text{ppm}/\text{Year}$		Max

Resistance of series resonance (ESR)						
Frequency	Mode	Ohm max		Frequency	Mode	Ohm max
32kHz $\leq f < 40\text{kHz}$	Fundamental	40k		60kHz $\leq f < 70\text{kHz}$	Fundamental	25k
40kHz $\leq f < 60\text{kHz}$	Fundamental	30k		70kHz $\leq f < 200\text{kHz}$	Fundamental	22k

Drawing**Order key**

Q	- 32.768000k	- TC206B	- 50	- B	- 12.5	- X
Part	Frequency	Package	Frequency tolerance	Temperature range	Load capacitance	Option
Q=Quartz	k=kHz	TC206B	$\pm\text{ppm}$ (25°C)	A= $0^\circ\text{C} \sim +70^\circ\text{C}$ B= $-10^\circ\text{C} \sim +60^\circ\text{C}$ C= $-10^\circ\text{C} \sim +70^\circ\text{C}$ D= $-20^\circ\text{C} \sim +70^\circ\text{C}$ E= $-40^\circ\text{C} \sim +85^\circ\text{C}$ H= $-20^\circ\text{C} \sim +80^\circ\text{C}$ I = $-10^\circ\text{C} \sim +50^\circ\text{C}$	pF SR=series	X=Special options