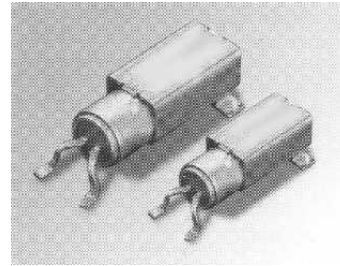


# Quartz SMD



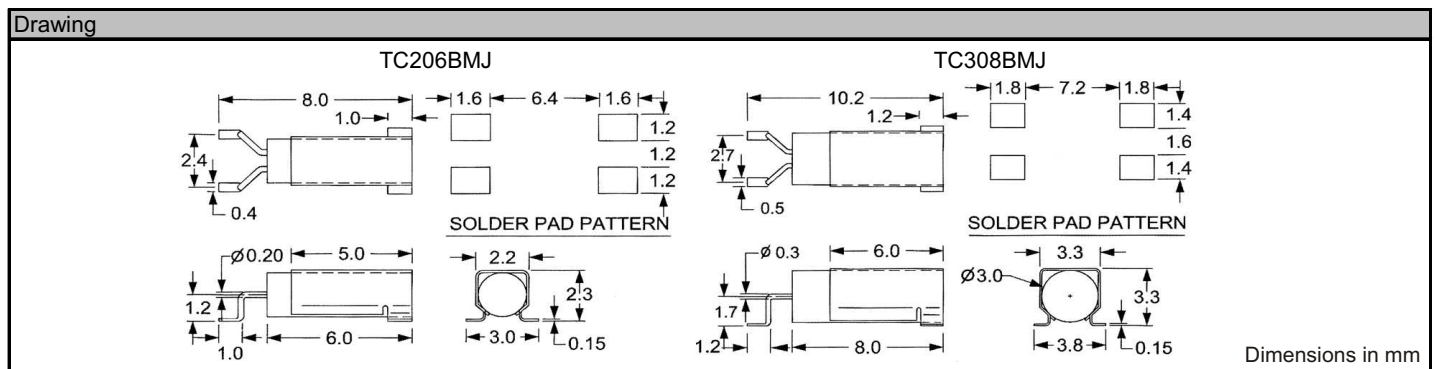
**TC308B MJ**  
**TC206B MJ**

**Features:**

- Cylindrical enclosures with mounting clips
- Surface mount pick & place
- High performance to cost ratio

Specifications					
		Symbol	TC308B MJ	TC206B MJ	Remarks
Frequency range		f	32.768kHz		Standard
			30kHz ~ 170kHz		Available
Frequency tolerance, Ta=25°C		f/f	± 20ppm ~ ± 50ppm		Others are offered
Load capacitance		C <sub>L</sub>	6pF ~ 12.5pF (Std.)		Please specify
Temp. coefficient		A	-0.04 x 10 <sup>-6</sup> / °C <sup>2</sup>		Max
Temperature range	Storage temperature	T <sub>STG</sub>	-40°C ~ +85°C		
	Operating temperature	T <sub>OPR</sub>	-10°C ~ +60°C		Others are offered
Drive level	Maximum drive level	M <sub>DL</sub>	1 W		Max
	Recommended drive level	R <sub>DL</sub>	-		
Series resistance		R <sub>1</sub>	35kOhm max	50kOhm max	As per table (25°C)
Shunt capacitance		C <sub>0</sub>	0,9pF	0,8pF	
Insulation resistance		IR	100M Ohm		Min
Aging		f <sub>A</sub>	± 5ppm/Year		Max

Resistance of series resonance (ESR)					
Frequency	Mode	Ohm	Frequency	Mode	Ohm
30kHz ≤ f < 40kHz	Fundamental	45K max	70kHz ≤ f < 120kHz	Fundamental	12k max
40kHz ≤ f < 60kHz	Fundamental	20K max	120kHz ≤ f < 170kHz	Fundamental	10k max
60kHz ≤ f < 70kHz	Fundamental	15k max			



Order key						
Part	Frequency	Package	Frequency tolerance	Temperature range	Load capacitance	Option
Q	- 32.768000k	- TC206B	- 50	- B	- 12.5	- MJ
Q=Quartz	k=kHz	TC206BMJ TC308BMJ	+/-ppm (25°C)	A= 0°C ~ 70°C B=-10°C ~ 60°C C=-10°C ~ 70°C D=-20°C ~ 70°C E=-40°C ~ 85°C H=-20°C ~ +80°C I=-10°C ~ +50°C	pF SR=series	MJ=Metal jacket X=Special options

Remarks: All specifications subject to change without notice!