



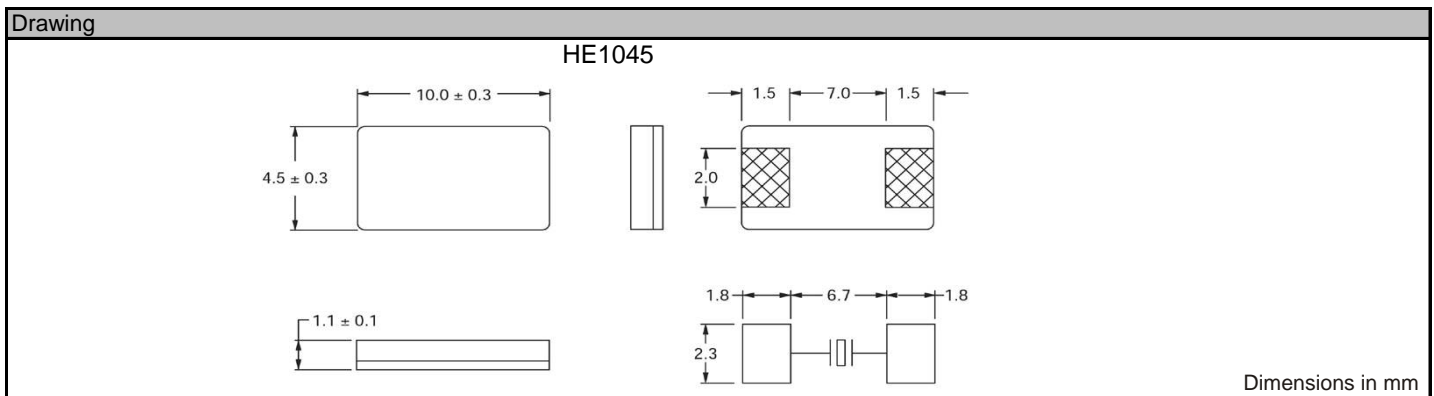
**HE1045**

Features:

- SMD
- High reliability seam welded seal
- Frequency up to 6 MHz
- Ultra thin profile
- RoHS conform

Specifications			
	Symbol	HE1045	Remarks
Frequency range	f	3.2768MHz ~ 6.000MHz	Fundamental mode
Frequency tolerance (std.), Ta=25°C	f/f	± 30ppm	Others are offered
Load capacitance	C <sub>L</sub>	10pF - 30pF	Please specify
Temperature tolerance (std.)	f/f	± 30ppm	Others are offered
Temperature range	Storage temperature	T <sub>STG</sub>	-30°C ~ +85°C
	Operating temperature	T <sub>OPR</sub>	0°C ~ +70°C
Drive level	Maximum drive level	M <sub>DL</sub>	500µW
	Recommended drive level	R <sub>DL</sub>	20µW ~ 100µW
Series resistance	R <sub>1</sub>	As per table	25°C
Shunt capacitance	C <sub>0</sub>	7pF	Max
Insulation resistance	I <sub>R</sub>	500M Ohm	
Aging	f <sub>A</sub>	± 5ppm/Year	Max

Resistance of series resonance (ESR)						
Frequency (MHz)	Mode	Ohm max		Frequency (MHz)	Mode	Ohm max
3.2768 <= f < 6.000	Fundamental	120-150				



Order key								
Q	- 4.000000M	- HE1045	- F	- 30	- 30	- A	- 30	- TR
Part	Frequency	Package	Mode of oscillation	Frequency tolerance	Temperature tolerance	Temperature range	Load capacitance	Option
Q=Quartz	M=MHz	HE1045	F=fund.	+/-ppm (25°C)	+/-ppm (Temp. range)	A= 0°C ~ 70°C B=-10°C ~ 60°C C=-10°C ~ 70°C D=-20°C ~ 70°C H=-20°C ~ +80°C I=-10°C ~ +50°C	pF SR=series	TR=Tape and reel X=Special options

Remarks: All specifications subject to change without notice!