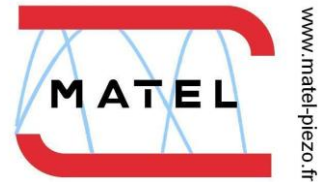


32.768KHz SMD Crystals

MHE



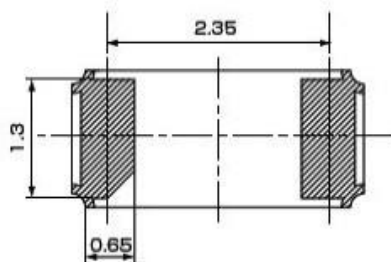
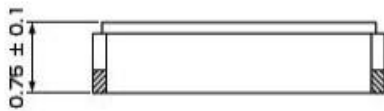
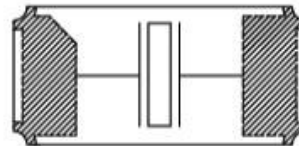
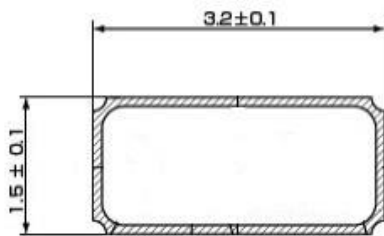
FEATURES
32.768 KHz Case Name: 3.2 x 1.5 x 0.75
APPLICATION
Clock

Electrical specifications :

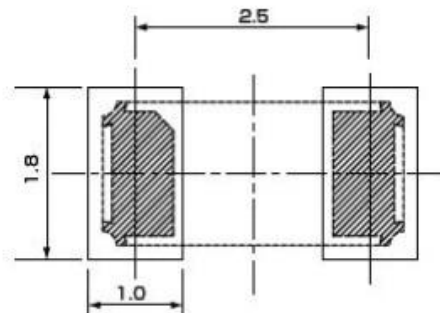
Parameters	Conditions	Min	Typ	Max	Units
Frequency Range			32.768		KHz
Frequency Tolerance	At 25°C	± 20		± 100	ppm
Temperature Coefficient	Ref to 25°C			-0.04	ppm/(Δ°C) ²
Operating Temperature Range		- 40		+ 85	°C
Storage Temperature Range		- 40		+ 85	°C
Shunt Capacitance			1.3		pF
Load Capacitance		9	12.5	30	pF
Insulation Resistance	DC 100 V	500			MΩ
Drive Level				1	μW
Ageing (first year)	At 25°C ±3°C	- 5		+ 5	ppm
Equivalent Series Resistance (ESR)				80	kΩ

Example: MHE32.768-125M2

Mechanical Dimensions (mm) :



RECOMMENDED SOLDERING PATTERN



SMD Crystal Units

TYPE	MHE	REVISION	01	CHECKED	PB	DATE	05/11/2015
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All specifications are subject to change without notice

Crystal Units KHz Codification Part Numbering System



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MHA 32.768 - 125 A 3

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Dimensions	Package	Nominal Frequency (in KHz)	-	Load Capacitance	Operating Temperature Range	Frequency Tolerance
2.0 x 1.2 x 0.6	MHD	Please enter The nominal Frequency	-	05 = 5pF 10 = 10pF 125 = 12.5 pF 30 = 30 pF Other load capacitance on request	A= 0°C to +50°C B= 0°C to +70°C C= -10°C to +60°C D= -10°C to +70°C E= -20°C to +70°C G= -30°C to +85°C M= -40° to +85°C	1=±10ppm 2=±20ppm 3=±30ppm 5=±50ppm 0=±100ppm X=±5ppm Y=±15ppm Z=±25ppm
3.2 x 1.5 x 0.75	MHE					
4.1 x 1.5 x 0.75	MHG					
6.9 x 1.4 x 1.4	MHH					
7.9 x 3.8 x 2.5	MHC					
2.7 x 8.7	MHI					
2 x 6	MHA					
2 x 6 K	MHK					
2 x 6 L	MHL					
2 x 6 M	MHL					
3 x 8	MHB					

TYPE	CODIFICATION Crystal KHz	REVISION	02	CHECKED	PB	DATE	29/04/2016
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All specifications are subject to change without notice