MEC Crystals

SMD Ultra Miniature Type

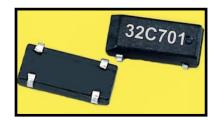
(32.768 KHz)

Features:

- High stability
- Low profile, plastic SM package
- Tape & Reel (3000 pcs/reel)
- Frequency: 32.768 KHz
- RoHs Compliant (Pb Free)
- Soldering Temp. Profile 260°C

Applications:

- Microprocessor systems
- Consumer electronics



Electrical Specifications:

Series	MCM450S-327	
Item	Symbol	Specifications
Frequency	fo	32.768 KHz
Frequency Tolerance	delta f/f ₀ (25°C)	±20ppm
Turnover	ТО	25 ± 5°C
Frequency Temp. Coefficient	beta	-0.034 ± 0.006ppm / °C2
Quality Factor	Q	100000 Typical
Operating Temperature	Т	-40°C ~ +85°C
Storage Temperature	Tstg	-55°C ~ +125°C
Equivalent Series Resistance	R1 (25°C ref.)	50 Kohm max
Max Insulation Resistance	IR	500 Mohm Min. (DC 100V ± 15V)
Load Capacitance	CL	12.5 pF Typical or specify
Motional Capacitance	C1	0.003 pF Typical
Shunt Capacity	Со	1.35 pF Typical
Capacitance Ratio	gamma	450 Typical
Drive Level	DL	1.0 μ W Max.
Aging	fa	±3ppm / year (25°C ± 3°C)
Shock Resistance	±5ppm Max. Drop test of 3 times on a hard board from 75cm height or shock test of 3000G x 0.3ms x 1/2sin wave x 3 directions.	

Part Numbering System:

MCM450S-327 - ②



② Load Capacitance

Code	Load Capacitance	
Nil	12.5 pF	
6	6 pF	
8	8 pF	
or specify		

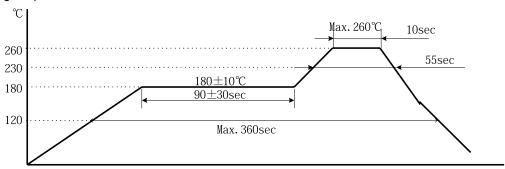
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SMD Ultra Miniature Type

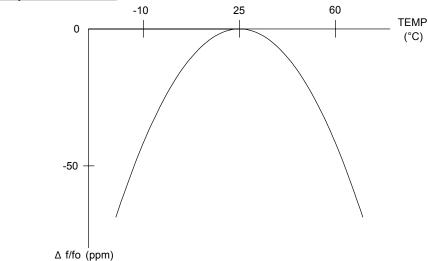
(32.768 KHz)

Soldering Profile:

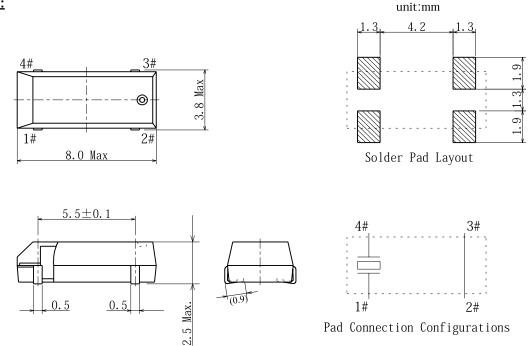
The soldering temperature is 260±5°C for 10 sec max.



Frequency vs Temperature Curve:



Dimensions:



Remark: Specifications are subject to change without prior notice. Please confirm with our sales engineer.

MEC Crystals

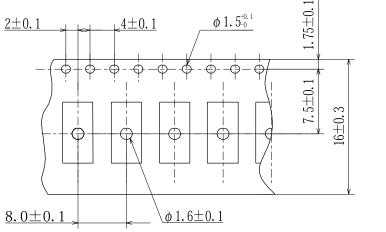
SMD Ultra Miniature Type

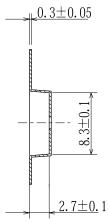
(32.768 KHz)

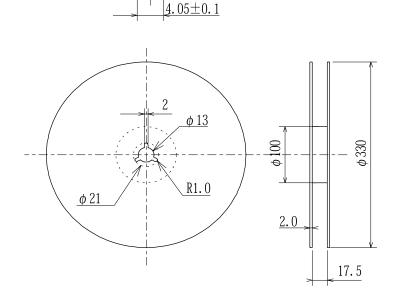
Packaging:

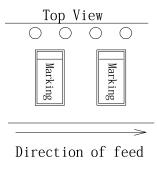
3000 pieces / Reel (13" Reel)

Precautions are taken to prevent damage due to transportation and handling.









Conforming to EIAJ RC1009B

Component Marking:

32Cyww

32C: Manufacturer's ID Code

y: The last digit of production year.

ww: Week Code

Label Marking:

Identified with RoHS 260°C

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