



7.5x5.0mm Ceramic SMD Crystal

C7AS

(Former FE)

DATASHEET

- Tolerances down to ± 30 PPM
- Stabilities down to ± 15 PPM
- Temperature Ranges as wide as -40°C to $+85^{\circ}\text{C}$
- Available above 50MHz (3^{rd} & 5^{th} Overtone Modes)

ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	6.000 ~ 160.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating (T_{OPR})	(See options below)
Storage (T_{STG})	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Shunt Capacitance (C_0)	5 pF
Load Capacitance (C_L)	(See options on page 2)
Drive Level	0.5 mW
Aging per year	± 5 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Resin
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR (Ω)
6.000 ~ 7.999	Fundamental	80
8.000 ~ 9.999	Fundamental	60
10.000 ~ 15.999	Fundamental	50
16.000 ~ 50.000	Fundamental	40
28.000 ~ 84.000	3^{rd} Overtone	60
>84.000 ~ 160.000	5^{th} Overtone	80

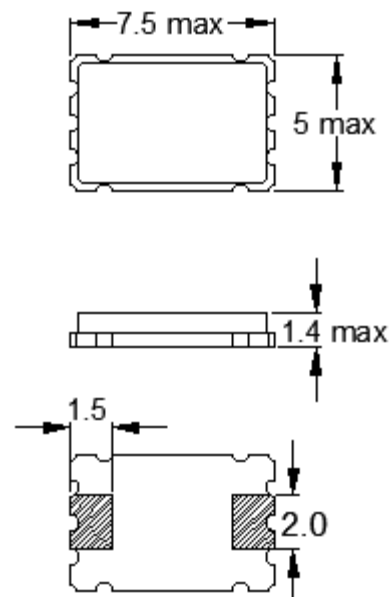
Available Operating Temperatures and Stabilities*

Operating Temperature	± 15 PPM	± 20 PPM	± 25 PPM	± 30 PPM	± 50 PPM
$0 \sim +70^{\circ}\text{C}$	O	O	O	O	O
$-10 \sim +60^{\circ}\text{C}$	O	O	O	O	O
$-10 \sim +70^{\circ}\text{C}$	O	O	O	O	O
$-20 \sim +70^{\circ}\text{C}$	O	O	O	O	O
$-30 \sim +85^{\circ}\text{C}$	X	O	O	O	O
$-40 \sim +85^{\circ}\text{C}$	X	O	O	O	O

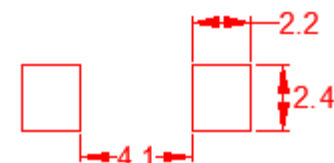
Key: O=Available, X=Not Available, Δ=Consult Fox Technical Support

*Does not imply a stocked part.

DIMENSIONS (mm)



Recommended Solder Pad Layout



Dimensions in mm

Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.



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Title/Description: C7AS Series Standard Specifications

Drawing Number: C7AS-DOC-1

Part Number:

Draftsperson: MAJ

Approved: BEC

Size: A

Cage: 61429

Revision Date: 10/24/2019



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TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	Reel Qty	G	H	I	J	K	L	M
Ø1.5	4.0	8.0	7.5	16.0	2.3	-T1=1,000 -T2=2,000 Default	2.0	Ø13	Ø21	Ø80	Ø180 Ø250	17.5	2.0

AVAILABLE OPTIONS & PART IDENTIFICATION¹

Example: F C7AS C C L 40.0

F	C7AS	C	C	L	M	40.0
Fox	Model Number	Tolerance	Stability	Load Capacitance ²	Operating Temperature	Frequency (MHz)
		B = ±50 PPM C = ±30 PPM	B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM	E = 10 pF G = 12 pF J = 15 pF L = 18 pF M = 20 pF	C = 0 to +70°C D = -10 to +60°C E = -10 to +70°C F = -20 to +70°C K = -30 to +85°C M = -40 to +85°C	

¹ Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

² Listed load capacitances represent the most commonly used. Other load capacitances are available. Contact Fox Technical Support for assistance



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Mouser Electronics

Authorized Distributor

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