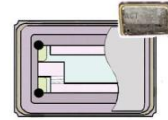


ACT 1016-SMX-4 Miniature 4 Pad Crystal Resonator

- Compact size 1.6 x 1.2 x 0.45mm
- Tight aging option (+/-1ppm 1st year @ 25°C)
- Frequency: 26MHz to 54MHz Fundamental AT cut
- Stability: To ±10ppm (-30~+85°C)



Characteristics

Frequency Range (MHz)	26.00 to 54.00
Operating temperature Top (°C)	-20~+70 standard, -30+85°C, -40+85°C
Tolerance @ 25°C (ppm)	±10, ±15, ±20, ±30 and ±50
Stability over temperature (ppm)	±10, ±15, ±20, ±30 and ±50 (Table 2)
Effective Series Resistance (Ω)	Table 1
Shunt capacitance (C0) (pF)	3pF max
Aging @25°C (ppm)	±2ppm 1st year std (±1ppm option)
Load capacitance (pF)	8 ~ 12pF
Drive level (μW)	50μW typ, 100μW max
Drive level dependency (DLD2) (Ω)*	≤30% ESR (20 steps)
Drive level dependency (FLD) (ppm)*	≤±10ppm DLD2 (20 steps)
Insulation resistance @100V _{DC}	500MΩ min

Rating

Storage temperature (°C)	-40~+85
MSL	1 (unlimited)
ESD	Not applicable

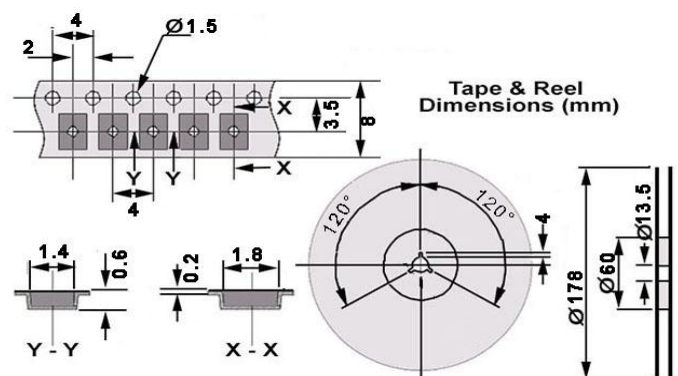
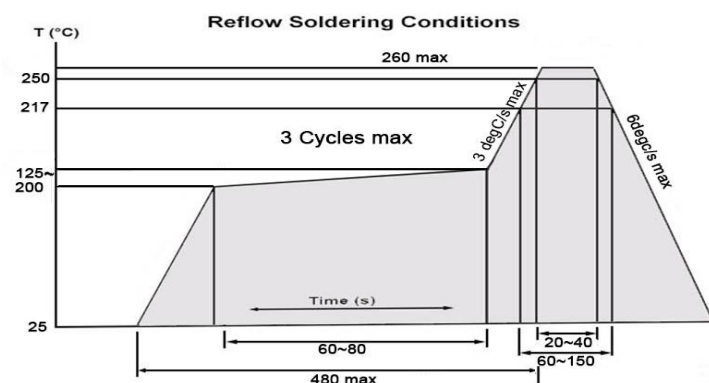
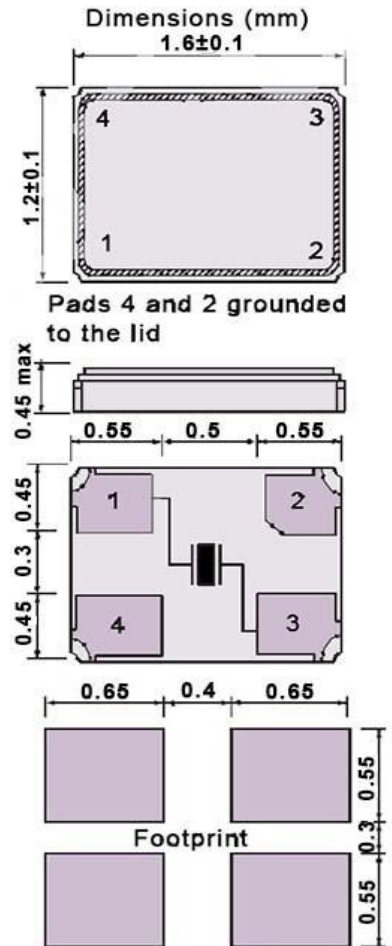
Table 1

Freq. (MHz)	ESR(Ω) max
26~29.999	150
30~54	100

Table 2

Temperature (°C)	Stability over temperature (ppm)				
	±10	±15	±20	±30	±50
-20~+70°C	✓	✓	✓	✓	✓
-30~+85°C	✓	✓	✓	✓	✓
-40~+85°C	Enquire	Enquire	✓	✓	✓

For stability ±10ppm over -30~+85°C the crystal will be operable over -40~+85°C, But stability is conditional over -30~+85°C only.



Please note that all parameters can not necessarily be specified in the same device.

To specify: Please refer to part numbering system appended to the end of this data

ISO9001 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY

Issue No. 2

H2

Date:

13/03/2014

ACT 1016-SMX-4 Miniature 4 Pad Crystal Resonator

CRYSTAL PART NUMBERING

CAZ	2700	E	F	F	GO	F	D	(#)	-PF
1016	27.00MHz Frequency	±10 ppm	±E ppm	-20 +70 Temp range	8 Load cap	Fundamental	3000 Packing		RoHS

1016	CAZ
------	-----

Tolerance 25°C ±ppm	
10	E
15	F
20	G
30	I
50	L

T _{OP} °C	
-10 +70	F
-20 +70	G
-30 +85	L
-40 +85	M

Load capacitance pF	
8	GO
9	JO
10	KO
11	MO
12	OO

Mode	
Fundamental	F

Tape & Reel	
3000	D
Loose	L

Stability over temp ±ppm	
10	F
15	G
20	I
30	K
50	O

Commodity code

854160 00 00

Standard

Frequency:

For part numbering use the first 4 characters of the frequency in Hz ie 27MHz = 27000000Hz so the code used in the part number is 2700. If the frequency is 100MHz or higher then the first 5 characters are used.

It is important to suffix the part number generated above with the actual frequency to give the full part number as illustrated below.

CAZ2700EFFGOFD-PF 27.00MHz

Tighter aging may be available for selected series please enquire.

Standard	Blank
±1ppm @25°C	1

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 3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY
 Issue No. 2 H2 Date:

13/03/2014