

Quartz Crystal : SX6035 , SX6035A



General description

SMD Crystals suitable for any kind of application and realized in AT Cut to get best performance (available temp. stability $\leq \pm 4$ ppm in the range $-20^{\circ}\text{C} / +70^{\circ}\text{C}$). Widely used in telecomm. Field and PC peripherals, PCMCIA cards, etc and thickness is a must. Can be realized with AT amental cut up to 45MHz



Features

- Small size & SMD
- Customizable characteristics
- Tolerances up to ± 5 ppm
- Temp. Stability up to ± 4 ppm

Electrical characteristics

Frequency range (MHz)	10 / 45 (Fund. AT Cut) , 32 / 125 (3th Ov. AT Cut)
Tolerance @ $+25^{\circ}\text{C}$	Standard ± 30 ppm , upon request up to ± 5 ppm
Resonance Mode	Serie , Parallel : 20pF, 30pF (1)
Nom. Driving Level	0.1mW
Temperature stability	standard : $\leq \pm 50$ ppm , upon request up to ± 4 ppm
Temperature range	$-20^{\circ}\text{C} / +70^{\circ}\text{C}$ (standard) , $-40^{\circ}\text{C} / +85^{\circ}\text{C}$ (industriale)
R_1	Fond. $< 50\Omega$, III OV $< 80\Omega$

(1) other values available

Available frequency temperature stabilities

	± 5 ppm (1)	± 7.5 ppm	± 10 ppm	± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm
$0^{\circ}\text{C} / +50^{\circ}\text{C}$	•	•	•	•	•	•	•
$-10^{\circ}\text{C} / +60^{\circ}\text{C}$	•	•	•	•	•	•	•
$-20^{\circ}\text{C} / +70^{\circ}\text{C}$	•	•	•	•	•	•	•
$-40^{\circ}\text{C} / +85^{\circ}\text{C}$				•	•	•	•

(1) also available 4ppm

Marking

14.7456 — Frequency (MHz)
BA 01 1 — Year
— Week
— Load capacitance

Load capacitance Code

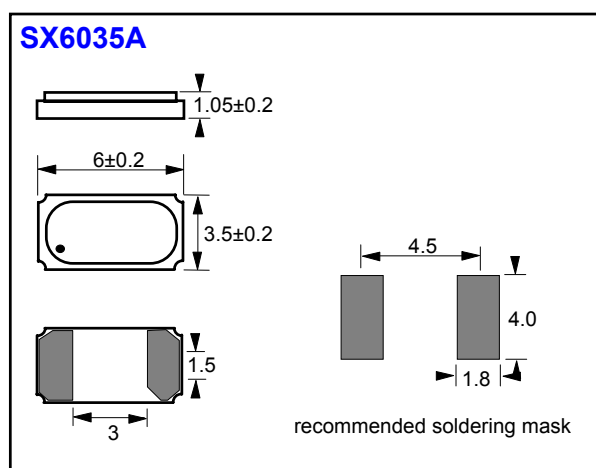
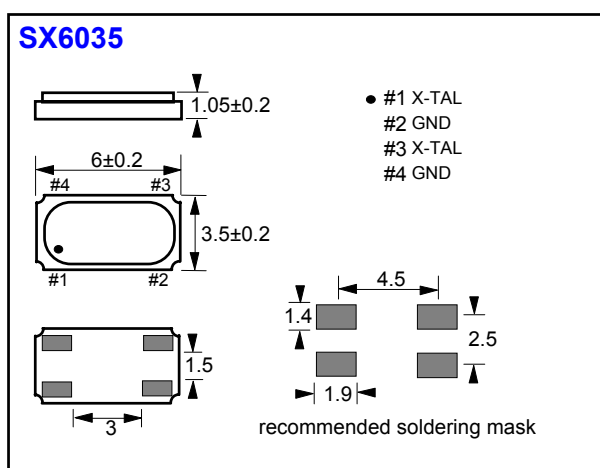
Value	Code
Serie	•
20pF	A
30pF	B
12pF	C
12.5pF	D
16pF	E
18pF	F
9pF	V
22pF	K

Value	Code
15pF	G
13pF	H
32pF	L
25pF	M
14pF	N
6pF	P
27pF	R
8pF	T
10pF	U

Year Code

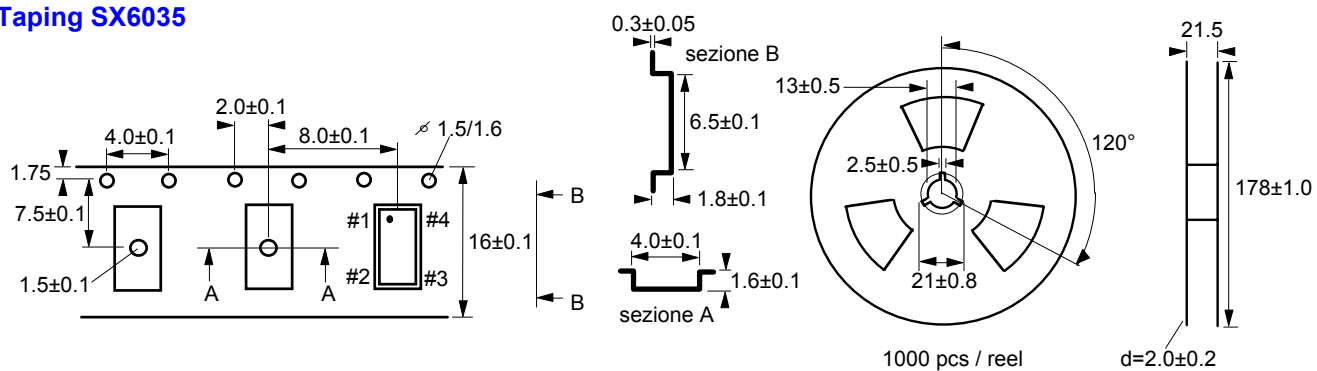
Year	Code
2001	1
2002	2
...	
2009	9
2010	0

Mechanical dimensions

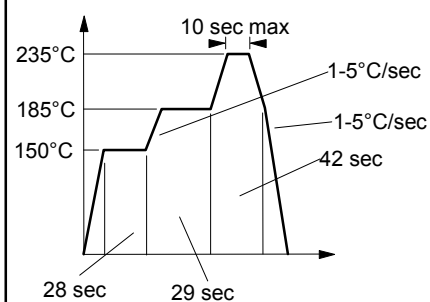


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Taping SX6035



Reflow diagram



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Part numbering

SX6035 – 010.000000 F AT P20 A F A TR

1 2 3 4 5 6 7 8 9

1: Case
SX6035
SX6035A

2: Frequency (MHz)
0000.000000
10 digits included comma

3: Oscillation Mode
F = Fundamental
X = 3 rd Overtone

4: Crystal blank Cut angle
AT

5: Resonance Mode
S = serie
P20 = Parallel 20pF
P30 = Parallel 30pF
P16 = Parallele 16pF
and so on

6: Freq. Tolerance (ppm)
A <±30ppm @+25°C
B <±25ppm @+25°C
C <±20ppm @+25°C
D <±15ppm @+25°C
E <±10ppm @+25°C
F <±7.5ppm @+25°C
G <±5.0ppm @+25°C

7: Temperature Range
A +0°C / +50°C
B +0°C / +60°C
C +0°C / +70°C
D -10°C / +60°C
E -10°C / +70°C
F -20°C / +70°C
G -30°C / +60°C
H -30°C / +70°C
L -30°C / +75°C
M -20°C / +85°C
N -40°C / +85°C
P -40°C / +105°C
Q -55°C / +105°C
R -55°C / +125°C

8: Freq. Temp. Stability (ppm)
A <±50ppm
B <±40ppm
C <±35ppm
D <±30ppm
E <±25ppm
F <±20ppm
G <±15ppm
H <±10ppm
L <±7.5ppm
M <±5.0ppm
N <±3.0ppm

Codes 6, 7,8 can be replaced by overall stability requirement and expressed as it follows :

X999, where

X = temp. Range code (see **7**)

999 = 3 digits indicating stability in ppm

example :

F100 = 100ppm overall in -20°C/+70°C

N050 = 50ppm overall in -40°C/+85°C

9: Packaging
TR Taped in reel

