

# 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  $\pm 5$ ppm
- Temp. Stability up to  $\pm 4$ ppm

## Electrical characteristics

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

	$\pm 5$ ppm (1)	$\pm 7.5$ ppm	$\pm 10$ ppm	$\pm 15$ ppm	$\pm 20$ ppm	$\pm 30$ ppm	$\pm 50$ 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

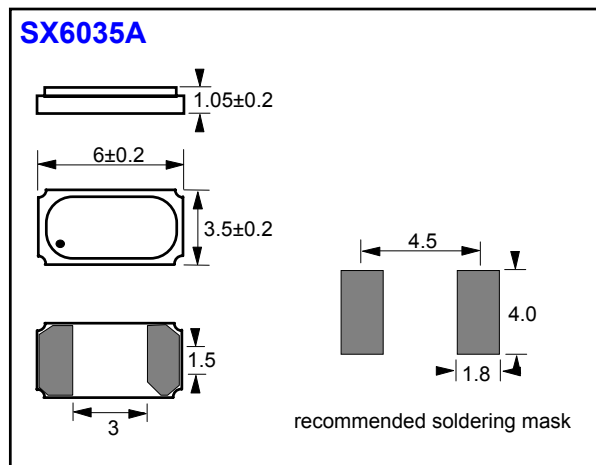
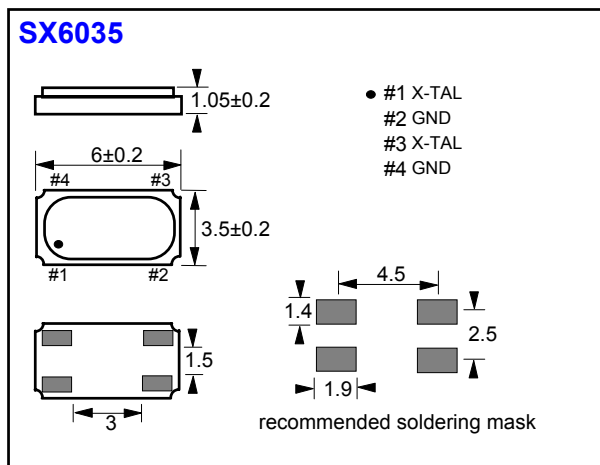
Value	Code
Serie	•
20pF	A
30pF	B
12pF	C
12.5pF	D
16pF	E
18pF	F
9pF	V
22pF	K

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

## Year Code

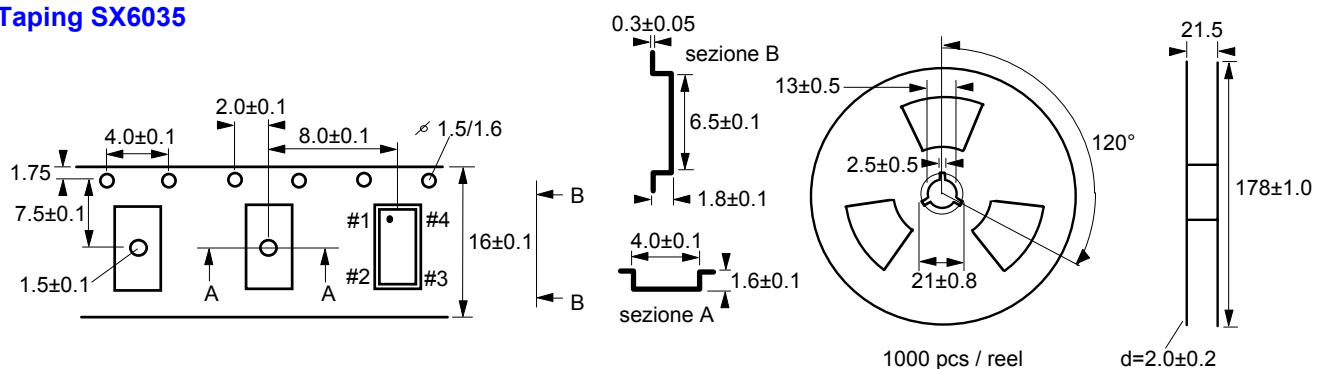
Year	Code
2001	1
2002	2
...	
2009	9
2010	0

## Mechanical dimensions

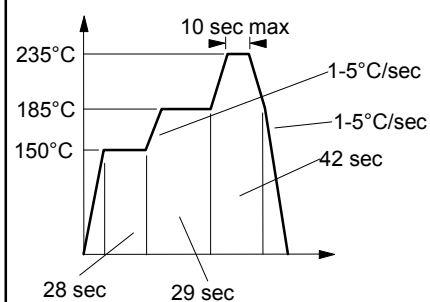


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## Taping SX6035



## Reflow diagram



# Quartz Crystal : SX6035 , SX6035A

## 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<sup>rd</sup> 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
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