



actual size

Quartz Crystal · SMQ32

SMD Tuning Fork Crystal · 13.2 x 4.9 mm

- 32.768 kHz standard
- reflow soldering temperature: 260 °C max.
- package height 4.8 mm max.



General Data

type	SMQ32
frequency	32.768 kHz (30.0 ~ 80.0 kHz on request)
frequency tolerance at 25 °C ± 5 °C	± 20 ppm / ± 30 ppm
load capacitance C_L	12.5 pF std. (6 pF ~ 12 pF on request)
temperature constant (T_C)	$T_C = -0.04 \cdot 10^{-6} / ^\circ C^2$ max. $T_C = -0.034 \cdot 10^{-6} / ^\circ C^2$ typical
frequency temperature characteristic	f (ppm) = $T_C \cdot (25^\circ C - T)^2$ T = requested temperature
operating temperature range	-20 °C ~ +70 °C / -40 °C ~ +85 °C
shunt capacitance C_0	2 pF typical
series resistance max. (ESR)	33.0 k Ω
storage temperature	-40 °C ~ +90 °C
drive level max.	1 μ W
aging first year	< ± 5 ppm

Frequency Stability vs. Temperature

		- 80 ppm	- 160 ppm
-20 °C ~ +70 °C	STD.	●	
-40 °C ~ +85 °C	T1		●

● standard

Marking

company code / 327 / date code

date code:

A ~ M: Jan. - Dec.

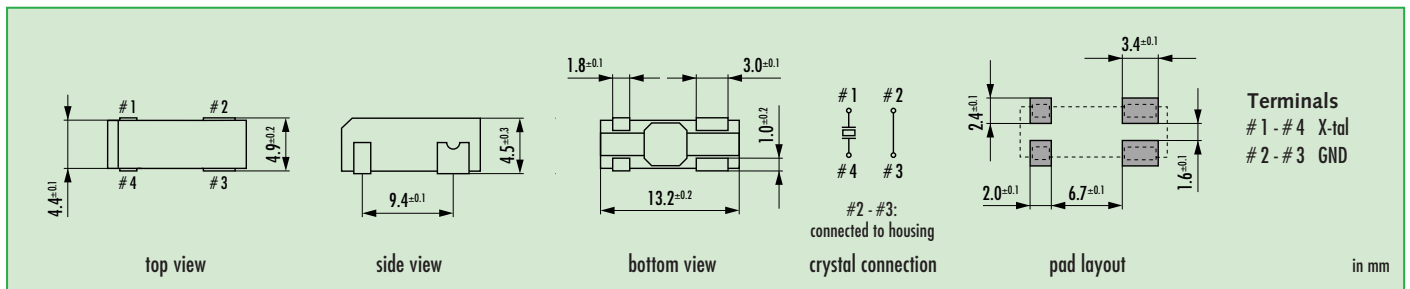
1: 2011 4: 2014

2: 2012 5: 2015

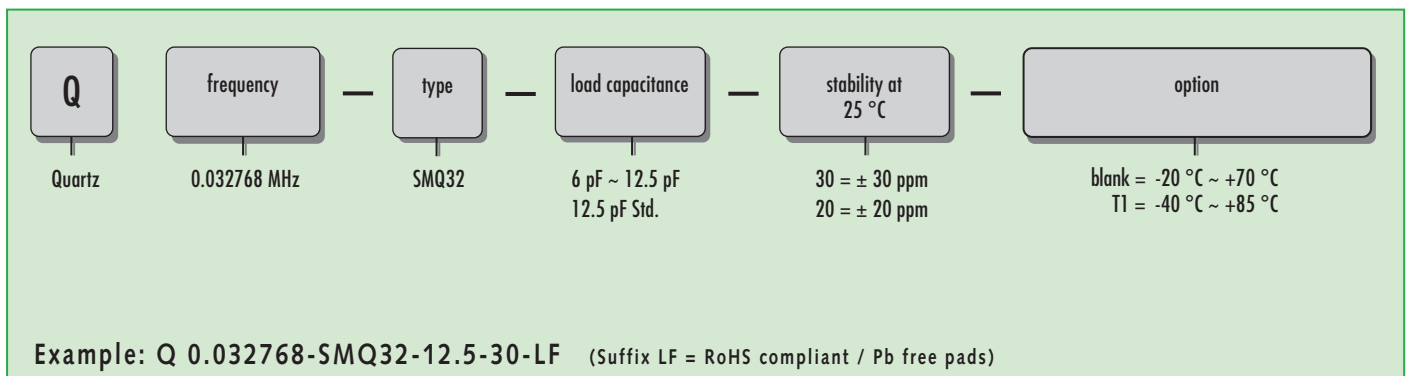
3: 2013 6: 2016

Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

Dimensions

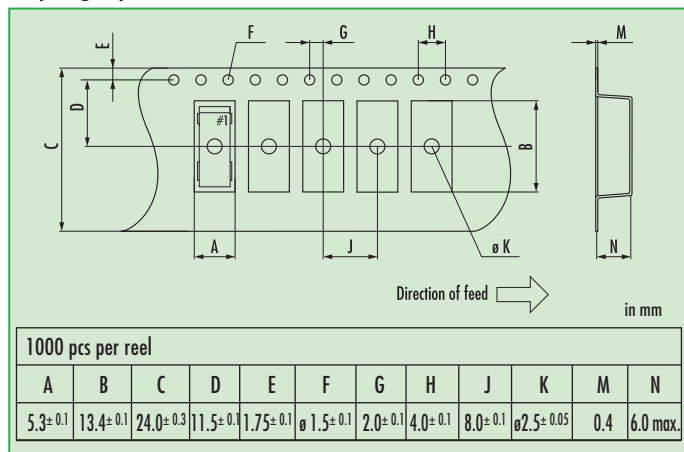


Order Information



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Taping Specification



Reflow Soldering Profile

