

ACT752SMX-2

The **ACT752SMX-2 family** is a low cost, 2 pad, high quality, low aging 7x5mm SMD Crystal in a ceramic base / metal lid package, seam sealed for good long term reliability. The wide frequency range and specification options ensure suitability for many applications.

APPLICATIONS: Wireless/WLAN, ATM, Cordless phones, Pagers, PC & Notebook,



Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	6.0 ~ 100.0MHz	Please specify
Frequency Tolerance (@25°C)	$\Delta f/fo$	± 30 & ± 50 ppm Standard	Or specify
Stability over temp range	Tc	± 50 ppm -10~+60°C Standard	Or specify
Temp Operating Range	Topr	0~+50°C ~ -40~+85°C	Please specify
Temp Storage Range	Tstg	-55 ~ +125°C	
Equivalent Series Resistance	ESR	See table 1	
Load Capacitance	CL	8pF, 10pF, 16pF, 20pF & Series	Or specify
Shunt Capacitance	C0	5pF max	
Drive Level	DL	10~100 μ W 50 μ W standard	(Custom available - Please enquire)
Drive Level Dependency	DLD	FDLD <10ppm ESR max / ESR min <1.3	0.1, 1.5, 10, 50, 100 μ W steps
Insulation Resistance	IR	500M Ω min	@100V DC
Aging	Fa	± 5 ppm p/year	(First year max @ 25°C)

Table 1	Freq. Range (MHz)	ESR (Ω) max	Mode / Cut
	6.000 ~ 7.999	150	Fundamental / AT
	8.000 ~ 8.999	100	Fundamental / AT
	9.000 ~ 11.000	50	Fundamental / AT
	11.000 ~ 40.000	40	Fundamental / AT
	26 ~ 100MHz	100	3 RD Overtone / AT

Pad Surface Material: Gold (Au)

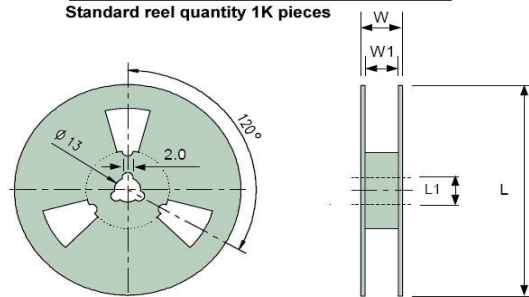
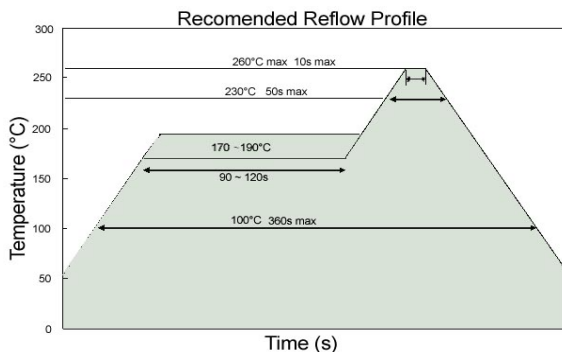
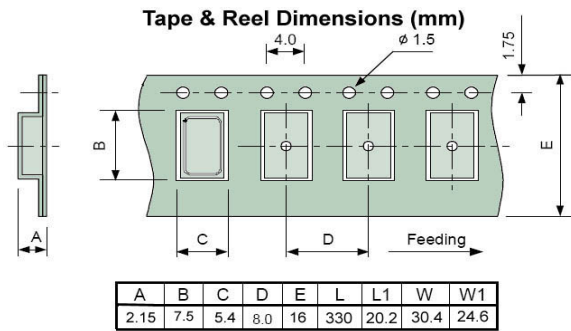
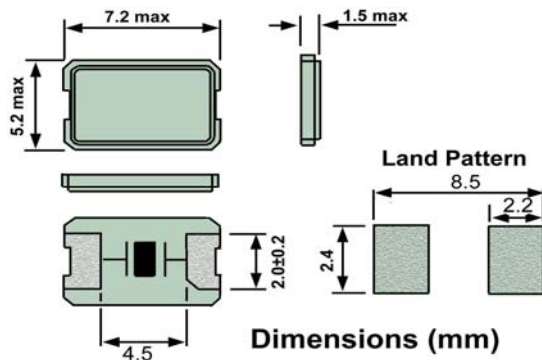


Table 2		± 10 ppm	± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm
Tolerance	25°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	STD	STD
	0 ~ +50°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stability	-10 ~ +60°C	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	STD	STD
	-20 ~ +70°C	Enquire	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	-40 ~ +85°C	Enquire	Enquire	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Customer to specify : Frequency, Frequency Tolerance, Temperature Stability, Operating Temperature & Load Capacitance

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

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

<http://www.actcrystals.com>

SERIES : ACT752SMX-2 Part numbering code is CJ

Example :

CJ 752SMX-2 **1200** (12.000MHz) **I** (±30ppm) **K** (±30ppm) **G** (-20+70) **RO** (16pF) **F** (Fund') **C** (1K Reel) **-PF** (RoHS)

Frequency	Tolerance (±ppm) @ 25°C	Stability Over Operating Temperature (°C)	Operating Temperature Range (°C)	Load Capacitance (pF or Series Resonance)	Mode	RoHS Comp'
6-9.999MHz 0 and 1st 3 digits of frequency	E 10	F 10	A -0+50	GO 8	F Fundamental	-PF
10-99.999MHz 1st four digits of frequency. See note 4	F 15	G 15	E -10+60	JO 9	A 3rd Overtone	
100MHz 1st five digits of frequency	G 20	I 20	G -20+70	KO 10		
	H 25	K 30	L -30+85	MO 11		
	I 30	L 50	M -40+85	OO 12		
	L 50	V 100		ZO 14		
				PO 15		
				RO 16		
				TO 18		
				VO 20		
				AA 24		
				BA 25		
				DA 30		
				SR SR		

Package
L = Loose
C = 1K Reels

Commodity Code
854160 00 00

Table 2

	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
Tolerance 25°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	STD	STD
Stability 0 ~ +50°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-10 ~ +60°C	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	STD	STD
-20 ~ +70°C	Enquire	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-40 ~ +85°C	Enquire	Enquire	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Full Example Part Number
CJ1200IKGROFC - PF 12.0000MHz

NOTES :

- 1) Tighter Tolerances and Stabilities and other Operating Temperature Ranges may be available.
- 2) ACT are always happy to consider truly custom specification parts which may require non-standard specification parameters, specific testing, customer requested AQL requirements, non standard packaging or taping and reeling and custom marking. Such devices would normally be allocated a custom specification part number which is wholly customer specific.
 (EG : A 12.000MHz custom ACT752SMX-2 device may have a part number such as CJ1200C- C1122-PF)
- 3) A guide to availability of tighter stabilities appears on page one of this data sheet in Table 2
- 4) Frequencies below 10.000MHz are prefixed with a "0" (eg: 0900 = 9MHz. Whereas 10.000MHz is 1000)