533 SMX-2 Series

5.0 x 3.2mm Crystal unit

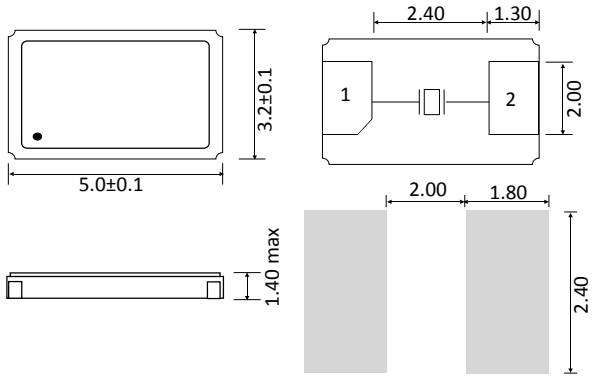
Glass sealing crystal
MOQ 3000 pieces
For smaller MOQ please enquire

Parameters		Specification	Remarks
Frequency range	F_nom	7.0MHz ~ 54.0MHz (Fundamental) 48.0MHz ~ 80.0MHz (3rd Overtone)	
Frequency tolerance	F_tol	±10.0ppm ~ ±50.0ppm	
Frequency stability over operating temperature range	F_stb	±10.0ppm ~ ±50.0ppm	Table 2
Operating temperature range	T_use	-20°C ~ +70°C, -30°C ~ +85°C, -40°C ~ +85°C	Table 2
Storage temperature	T_stg	-55°C ~ +125°C	
Load capacitance	CL	8.0pF ~ 30.0pF, series	
Equivalent series resistance	ESR	Table 1	
Shunt capacitance	C0	7.0pF max	
Drive level	DL	300µW max	100µW typical
Frequency aging	F_age	±5.0ppm at 25°C, 1st Year	
Moisture sensitivity level	MSL	1 (unlimited)	
Electrostatic discharge	ESD	Not applicable	
Insulation resistance	IR	500MΩ min	At 100V DC

Table 1. Frequency range (MHz) vs ESR (max)	
8.0MHz ~ 9.999MHz	120Ω
10.0MHz ~ 11.999MHz	80Ω
12.0MHz ~ 23.999MHz	50Ω
24.0MHz ~ 54.000MHz	30Ω
48.0MHz ~ 80.000MHz	70Ω

Table 2. Frequency Stability vs Temperature					
Temp. (°C)	Stability in ppm				
	±10	±15	±20	±30	±50
-20°C ~ 70°C	Enquire	Enquire	Enquire	√	√
-30°C ~ 85°C	Enquire	Enquire	Enquire	√	√
-40°C ~ 85°C	Enquire	Enquire	Enquire	√	√

Dimensions (mm)



Part number generation								
RA	2700	G	K	L	GO	F	L	-PF
ACT Series Code	Frequency (MHz)	Frequency Tolerance (±ppm)	Frequency stability over temperature range (±ppm)	Operating Temperature Range (°C)	Load capacitance (CL -pF)	Frequency mode	Packaging (Tape & Reel)	RoHS
RA	8MHz = 0800 27MHz = 2700 Note: Use the first 4 characters of the frequency in Hz i.e. 27MHz =27000000Hz If the frequency is 100MHz or higher then the first 5 characters are used	±10 = E ±15 = F ±20 = G ±30 = I ±50 = L ±100 = N	±10 = F ±15 = G ±20 = I ±30 = K ±50 = O ±100 = V	-10 ~ +60 = E -20 ~ +70 = G -30 ~ +85 = L -40 ~ +85 = M	8 = GO 9 = JO 10 = KO 12 = OO 13 = YO 14 = ZO 16 = RO 18 = TO 20 = VO 22 = WO 30 = DA Series = SR	Fundamental = F 3rd Overtone = A	Loose = L 1000pcs = C	RoHS = -pF

Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below.
Full Example Part Number : **RA0800GKLGOFL-PF [8.000MHz], RA2700GKLGOFL-PF [27.000MHz] , RA2457GKLGOFL-PF [24.576MHz]**

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ISO9001 Registered

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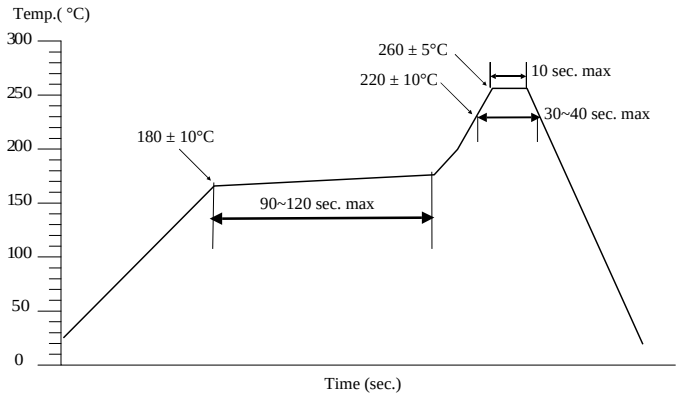
Solder Reflow Profile



Additional information

Drawing control: (Internal use only)
Commodity code: 854160 00 00
Issue number: N1
Date: 1/02/2017
Internal reference: H2