

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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ECS-23G SMD CRYSTAL

Request a Sample



The minature ECS-23G is a compact SMD Crystal. The industry standard $6 \times 3.5 \times 1.2$ mm ceramic package is ideal for today's SMD manufacturing environment.

ECS-23G SMD CRYSTAL

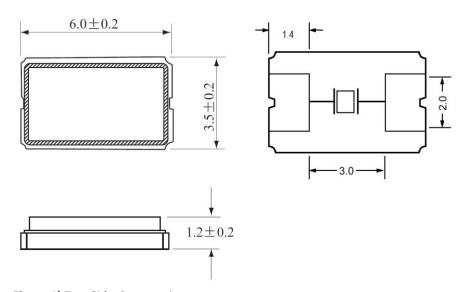


- Low Profile
- 6.0 x 3.5 mm Footprint
- Extended Temp. Range
- RoHS Compliant

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS		ECS-23G		
		MIN	TYP	MAX	
Frequency		8.000		50.000	MHz
Mode of Oscillation	Fundamental				
Frequency Tolerance	@ +25°C (J)			± 20	ppm
Frequency Stability	-40 ~ +85°C (GN)			± 30	ppm
Shunt Capacitance	Co			7	рF
Load Capacitance	Specify in P/N		18		рF
Drive Level	DL		10	100	μW
Operating Temperature	Topr	-40		+85	°C
Storage Temperature	Tstg	-40		+90	°C
Aging (First Year)	@ +25°C ±3°C			±5	ppm
Insulation Resistance	@100 Vdc	500			МΩ

DIMENSIONS (mm)



Frequency (MHz)	ESR Ω Max.
8.000 ~ 9.999	100
10.000 ~ 11.999	80
12.000 ~ 15.999	60
16.000 ~ 50.000	50

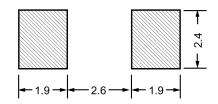


Figure 2) Suggested land pattern

Figure 1) Top, Side, Bottom views

PART NUMBERING GUIDE: Example ECS-240-18-23G-JGN-TR

ECS - FR	EQUENCY ABBREVIATION	LOAD	PACKAGE		CUSTOM OPTIO		ACKAGING
		CAPACITANCE		Tolerance	Stability	Temp Range	
ECS	240 = 24.000 MHz See P/N Guide	18 = 18 pF	-23G = ECS-23G	A = ± 25 ppm J = ± 20 ppm *R = ± 15 ppm *C = ± 10 ppm	E = ± 50 ppm G = ± 30 ppm H = ± 25 ppm *T = ± 20 ppm *W = ± 15 ppm *K = ± 10 ppm	L = -10 ~ +70°C M = -20 ~ +70°C Y = -30 ~ +85°C N = -40 ~ +85°C	TR = Tape & Reel 1K/Reel

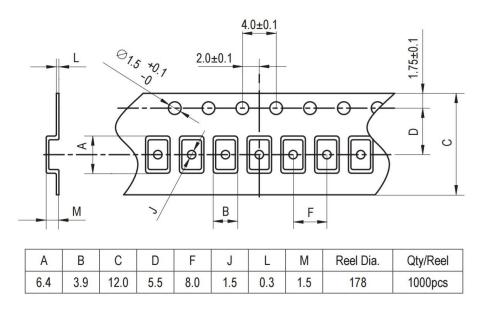
*Contact ECS for availability

Rev.2017





POCKET TAPE DIMENSIONS (mm)



SOLDER PROFILE				
Peak solder Temp +260°C Max 10 sec Max.				
2 Cycles Max.				
MSL 1, Lead Finish Au				

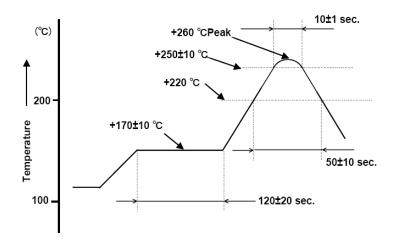


Figure	11	Suga	actad	Poflow	Drofila
Figure		$-$ SH $\alpha\alpha$	PSTPA	RPTIOW	Prome

DEVELOPED FREQUENCIES				
Abbreviation	Frequency (MHZ)			
080	8.000			
100	10.000			
120	12.000			
160	16.000			
184	18.432			
200	20.000			
240	24.000			
250	25.000			
480	48.000			