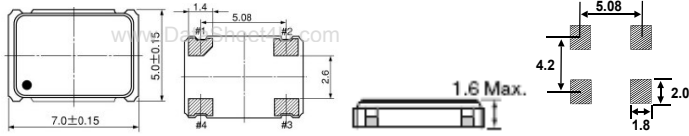


CITIZEN CSX-750FBC, FCC, FJC SMD OSCILLATORS



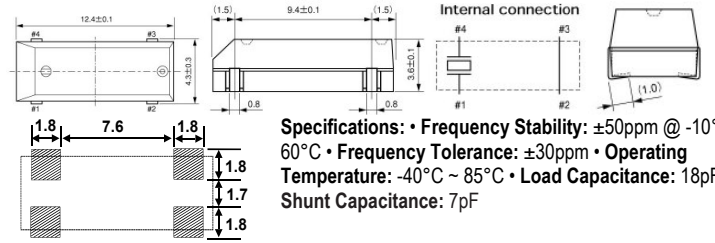
SPECIFICATIONS	CSX750FCC	CSX750FBC	CSX750FJC	CSX750FJC
Supply Voltage	Vdd: 5.0V±0.5V		Vdd: 3.3V±0.3V	
Frequency Range:	1.000MHz - 39.999MHz / 40.000MHz - 70.000MHz	1.000MHz - 39.999MHz	40.000MHz - 54.000MHz	40.000MHz - 80.000MHz
Operating Temperature:	-40°C ~ 85°C			
Storage Temperature:	-55°C ~ 125°C			
Current Consumption:	25mA Max.	45mA Max.	15mA Max.	25mA Max.
Duty:	TTL Level (1.4V) CMOS Level (1/2 Vdd)		-	
Output Voltage:	45~55% / 0.9Vdd Min.			
Output Load:	10TTL Max. / 50pF Max.			
Rise & Fall Time:	tr, tf	8 nsec Max. / 6 nsec Max.	8 nsec Max. / 6 nsec Max.	6 nsec Max.
Start-Up Time:		4 msec Max. / 10 msec Max.	4 msec Max. / 10 msec Max.	10 msec Max.
Input Voltage:	V _{OH} / V _{IL}	2.0V Min. / 50pF Max.	30pF Max. / 15pF Max.	0.7Vdd Min. / 30pF Max.
Disable Current:	10mA Max. / 20mA Max. / 5mA Max. / 5mA Max. / 10uA Max.			
Stand-By Current				

Cat No.	Frequency	Net Price Each		
		1	10	50
CSX750FBC SERIES				
CSX750FBC-1.8432M-UT	1.8432MHZ	3.18	2.74	1.99
CSX750FBC-4.000M-UT	4.000MHZ	3.18	2.74	1.99
CSX750FBC-7.3728M-UT	7.3728MHZ	3.18	2.74	1.99
CSX750FBC-8.000M-UT	8.000MHZ	3.18	2.74	1.99
CSX750FBC-10.000M-UT	10.000MHZ	3.18	2.74	1.99
CSX750FBC-12.000M-UT	12.000MHZ	3.18	2.74	1.99
CSX750FBC-12.288M-UT	12.288MHZ	3.18	2.74	1.99
CSX750FBC-14.31818M-UT	14.31818MHZ	3.18	2.74	1.99
CSX750FBC-14.7456M-UT	14.7456MHZ	3.18	2.74	1.99
CSX750FBC-16.000M-UT	16.000MHZ	3.18	2.74	1.99
CSX750FBC-16.384M-UT	16.384MHZ	3.18	2.74	1.99
CSX750FBC-18.432M-UT	18.432MHZ	3.18	2.74	1.99
CSX750FBC-20.000M-UT	20.000MHZ	3.18	2.74	1.99
CSX750FBC-24.000M-UT	24.000MHZ	3.18	2.74	1.99
CSX750FBC-24.576M-UT	24.576MHZ	3.18	2.74	1.99
CSX750FBC-25.000M-UT	25.000MHZ	3.18	2.74	1.99
CSX750FBC-27.000M-UT	27.000MHZ	3.18	2.74	1.99
CSX750FBC-32.768M-UT	32.768MHZ	3.18	2.74	1.99
CSX750FBC-33.333M-UT	33.333MHZ	3.18	2.74	1.99

Cat No.	Frequency	Net Price Each		
		1	10	50
CSX750FJC SERIES				
CSX750FJC-40.000M-UT	40.000MHZ	3.18	2.74	1.99
CSX750FJC-48.000M-UT	48.000MHZ	3.18	2.74	1.99
CSX750FJC-50.000M-UT	50.000MHZ	3.18	2.74	1.99
CSX750FJC-60.000M-UT	60.000MHZ	3.18	2.74	1.99
CSX750FJC-66.666M-UT	66.666MHZ	3.18	2.74	1.99
CSX750FJC-80.000M-UT	80.000MHZ	4.18	3.59	2.61

Cat No.	Frequency	Net Price Each		
		1	10	50
CSX750FCC SERIES				
CSX750FCC-1.8432M-UT	1.8432MHZ	3.18	2.74	1.99
CSX750FCC-3.6864M-UT	3.6864MHZ	3.18	2.74	1.99
CSX750FCC-4.000M-UT	4.000MHZ	3.18	2.74	1.99
CSX750FCC-7.3728M-UT	7.3728MHZ	3.18	2.74	1.99
CSX750FCC-8.000M-UT	8.000MHZ	3.18	2.74	1.99
CSX750FCC-10.000M-UT	10.000MHZ	3.18	2.74	1.99
CSX750FCC-14.7456M-UT	14.7456MHZ	3.18	2.74	1.99
CSX750FCC-16.000M-UT	16.000MHZ	3.18	2.74	1.99
CSX750FCC-20.000M-UT	20.000MHZ	3.18	2.74	1.99
CSX750FCC-24.000M-UT	24.000MHZ	3.18	2.74	1.99
CSX750FCC-24.576M-UT	24.576MHZ	3.18	2.74	1.99
CSX750FCC-25.000M-UT	25.000MHZ	3.18	2.74	1.99
CSX750FCC-27.000M-UT	27.000MHZ	3.18	2.74	1.99
CSX750FCC-40.000M-UT	40.000MHZ	3.18	2.74	1.99
CSX750FCC-48.000M-UT	48.000MHZ	3.18	2.74	1.99
CSX750FCC-50.000M-UT	50.000MHZ	3.18	2.74	1.99
CSX750FCC-60.000M-UT	60.000MHZ	3.18	2.74	1.99
CSX750FCC-66.666M-UT	66.666MHZ	3.18	2.74	1.99

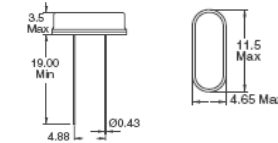
CITIZEN CM309S CRYSTALS



Specifications: • Frequency Stability: ±50ppm @ -10°C ~ 60°C • Frequency Tolerance: ±30ppm • Operating Temperature: -40°C ~ 85°C • Load Capacitance: 18pF • Shunt Capacitance: 7pF

Cat No.	Frequency	Net Price Each		
		1	10	50
CM309S-3.579545MABJ-UT	3.579545MHz	1.36	1.17	0.85
CM309S-3.6864MABJ-UT	3.6864MHz	1.36	1.17	0.85
CM309S-4.000MABJ-UT	4.000MHz	1.36	1.17	0.85
CM309S-4.9152MABJ-UT	4.9152MHz	1.36	1.17	0.85
CM309S-6.000MABJ-UT	6.000MHz	1.36	1.17	0.85
CM309S-7.3728MABJ-UT	7.3728MHz	1.36	1.17	0.85
CM309S-8.000MABJ-UT	8.000MHz	1.36	1.17	0.85
CM309S-10.000MABJ-UT	10.000MHz	1.36	1.17	0.85
CM309S-11.0592MABJ-UT	11.0592MHz	1.36	1.17	0.85
CM309S-11.2896MABJ-UT	11.2896MHz	1.36	1.17	0.85
CM309S-12.000MABJ-UT	12.000MHz	1.36	1.17	0.85
CM309S-12.288MABJ-UT	12.288MHz	1.36	1.17	0.85
CM309S-14.31818MABJ-UT	14.31818MHz	1.36	1.17	0.85
CM309S-14.7456MABJ-UT	14.7456MHz	1.36	1.17	0.85
CM309S-16.000MABJ-UT	16.000MHz	1.36	1.17	0.85
CM309S-16.384MABJ-UT	16.384MHz	1.36	1.17	0.85
CM309S-18.432MABJ-UT	18.432MHz	1.36	1.17	0.85
CM309S-20.000MABJ-UT	20.000MHz	1.36	1.17	0.85
CM309S-22.1184MABJ-UT	22.1184MHz	1.36	1.17	0.85
CM309S-24.000MABJ-UT	24.000MHz	1.36	1.17	0.85
CM309S-24.576MABJ-UT	24.576MHz	1.36	1.17	0.85
CM309S-25.000MABJ-UT	25.000MHz	1.36	1.17	0.85
CM309S-27.000MABJ-UT	27.000MHz	1.36	1.17	0.85
CM309S-30.000MABJ-UT	30.000MHz	1.36	1.17	0.85
CM309S-32.000MABJ-UT	32.000MHz	1.36	1.17	0.85
CM309S-48.000MABJ-UT	48.000MHz	1.36	1.17	0.85

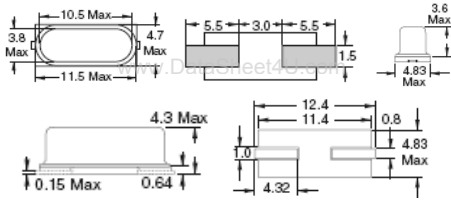
HC49US SERIES THROUGH-HOLE CRYSTALS



Specifications: • Frequency Stability: ±50ppm • Frequency Tolerance: ±30ppm • Operating Temperature: -20°C ~ 70°C • Load Capacitance: 18pF • Shunt Capacitance: 7pF

Cat No.	Frequency	Net Price Each		
		1	10	50
HC49US-3.579545MABJ-UB	3.579545MHz	0.72	0.62	0.45
HC49US-3.6864MABJ-UB	3.6864MHz	0.72	0.62	0.45
HC49US-4.000MABJ-UB	4.000MHz	0.72	0.62	0.45
HC49US-4.194304MABJ-UB	4.194304MHz	0.72	0.62	0.45
HC49US-4.9152MABJ-UB	4.9152MHz	0.72	0.62	0.45
HC49US-5.000MABJ-UB	5.000MHz	0.72	0.62	0.45
HC49US-6.000MABJ-UB	6.000MHz	0.72	0.62	0.45
HC49US-6.144MABJ-UB	6.144MHz	0.72	0.62	0.45
HC49US-7.3728MABJ-UB	7.3728MHz	0.72	0.62	0.45
HC49US-8.000MABJ-UB	8.000MHz	0.72	0.62	0.45
HC49US-8.192MABJ-UB	8.192MHz	0.72	0.62	0.45
HC49US-9.8304MABJ-UB	9.8304MHz	0.72	0.62	0.45
HC49US-10.000MABJ-UB	10.000MHz	0.72	0.62	0.45
HC49US-11.0592MABJ-UB	11.0592MHz	0.72	0.62	0.45
HC49US-12.000MABJ-UB	12.000MHz	0.72	0.62	0.45
HC49US-14.31818MABJ-UB	14.31818MHz	0.72	0.62	0.45
HC49US-14.7456MABJ-UB	14.7456MHz	0.72	0.62	0.45
HC49US-16.000MABJ-UB	16.000MHz	0.72	0.62	0.45
HC49US-18.432MABJ-UB	18.432MHz	0.72	0.62	0.45
HC49US-20.000MABJ-UB	20.000MHz	0.72	0.62	0.45
HC49US-22.1184MABJ-UB	22.1184MHz	0.72	0.62	0.45
HC49US-24.000MABJ-UB	24.000MHz	0.72	0.62	0.45
HC49US-24.576MABJ-UB	24.576MHz	0.72	0.62	0.45
HC49US-25.000MABJ-UB	25.000MHz	0.72	0.62	0.45
HC49US-27.000MABJ-UB	27.000MHz	0.72	0.62	0.45
HC49US-40.000MABJ-UB	40.000MHz	0.72	0.62	0.45

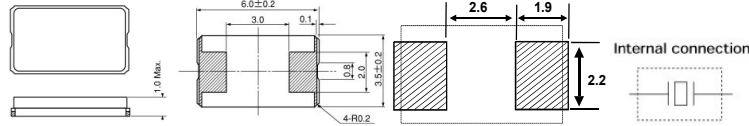
HCM49 SERIES SURFACE MOUNT CRYSTALS



Specifications: • Frequency Stability: ± 30 ppm • Frequency Tolerance: ± 50 ppm • Operating Temperature: $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ • Load Capacitance: 18pF • Shunt Capacitance: 7pF

Cat No.	Frequency	Net Price Each		
		1	10	50
HCM49-3.579545MABJ-UT	3.579545MHz	0.80	0.69	0.50
HCM49-3.6864MABJ-UT	3.6864MHz	0.80	0.69	0.50
HCM49-4.000MABJ-UT	4.000MHz	0.80	0.69	0.50
HCM49-6.000MABJ-UT	6.000MHz	0.80	0.69	0.50
HCM49-7.3728MABJ-UT	7.3728MHz	0.80	0.69	0.50
HCM49-8.000MABJ-UT	8.000MHz	0.80	0.69	0.50
HCM49-9.8304MABJ-UT	9.8304MHz	0.80	0.69	0.50
HCM49-10.000MABJ-UT	10.000MHz	0.80	0.69	0.50
HCM49-11.0592MABJ-UT	11.0592MHz	0.80	0.69	0.50
HCM49-12.000MABJ-UT	12.000MHz	0.80	0.69	0.50
HCM49-12.288MABJ-UT	12.288MHz	0.80	0.69	0.50
HCM49-14.31818MABJ-UT	14.31818MHz	0.80	0.69	0.50
HCM49-14.7456MABJ-UT	14.7456MHz	0.80	0.69	0.50
HCM49-16.000MABJ-UT	16.000MHz	0.80	0.69	0.50
HCM49-18.432MABJ-UT	18.432MHz	0.80	0.69	0.50
HCM49-20.000MABJ-UT	20.000MHz	0.80	0.69	0.50
HCM49-22.1184MABJ-UT	22.1184MHz	0.80	0.69	0.50
HCM49-24.000MABJ-UT	24.000MHz	0.80	0.69	0.50
HCM49-24.576MABJ-UT	24.576MHz	0.80	0.69	0.50
HCM49-25.000MABJ-UT	25.000MHz	0.80	0.69	0.50
HCM49-27.000MABJ-UT	27.000MHz	0.80	0.69	0.50

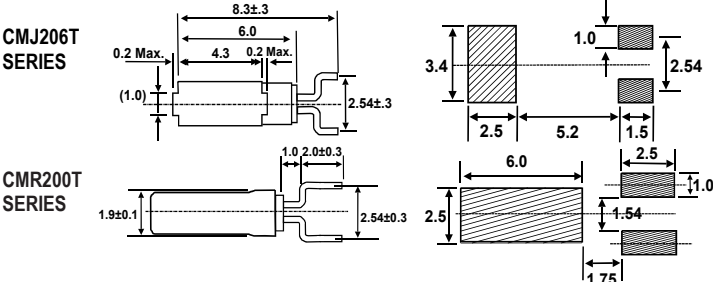
CS10 SERIES CERAMIC SURFACE MOUNT CRYSTALS



Specifications: • Frequency Stability: ± 50 ppm, $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ • Frequency Tolerance: ± 30 ppm • Operating Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ • Load Capacitance: 18pF

Cat No.	Frequency	Net Price Each		
		1	10	50
CS10-12.000MABJ-UT	12.000MHz	1.79	1.54	1.12
CS10-12.288MABJ-UT	12.288MHz	1.79	1.54	1.12
CS10-13.560MABJ-UT	13.560MHz	1.79	1.54	1.12
CS10-14.31818MABJ-UT	14.31818MHz	1.79	1.54	1.12
CS10-14.7456MABJ-UT	14.7456MHz	1.79	1.54	1.12
CS10-16.000MABJ-UT	16.000MHz	1.79	1.54	1.12
CS10-18.432MABJ-UT	18.432MHz	1.79	1.54	1.12
CS10-20.000MABJ-UT	20.000MHz	1.79	1.54	1.12
CS10-22.1184MABJ-UT	22.1184MHz	1.79	1.54	1.12
CS10-24.00MABJ-UT	24.00MHz	1.79	1.54	1.12
CS10-24.576MABJ-UT	24.576MHz	1.79	1.54	1.12
CS10-25.000MABJ-UT	25.000MHz	1.79	1.54	1.12
CS10-27.000MABJ-UT	27.000MHz	1.79	1.54	1.12
CS10-40.000MABJ-UT	40.000MHz	1.79	1.54	1.12
CS10-48.000MABJ-UT	48.000MHz	1.79	1.54	1.12

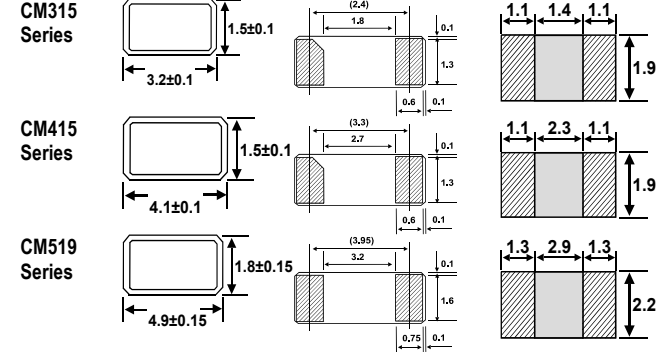
CMJ206, CMR200T SERIES SMD 32.768kHz Crystals



Specifications: • Frequency: 32.768kHz • Frequency Tolerance: ± 20 ppm • Operating Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ • Storage Temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ • Drive Level: $1\mu\text{W}$

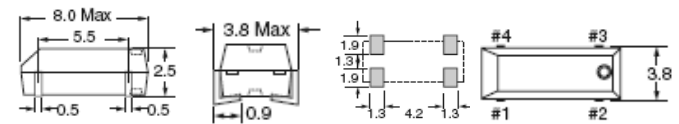
Cat No.	Frequency	Load Cap	Net Price Each		
			1	10	50
CMJ206T32.768KDZB-UT	32.768KHz	6pF	0.88	0.76	0.55
CMJ206T32.768KDZF-UT	32.768KHz	12.5pF	0.88	0.76	0.55
CMR200T32.768KDZB-UT	32.768KHz	6pF	0.72	0.62	0.45
CMR200T32.768KDZF-UT	32.768KHz	12.5pF	0.72	0.62	0.45

CM315, CM415, CM519 SERIES SMD 32.768KHZ CRYSTALS



Cat No.	Frequency	Load Cap	Net Price Each		
			1	10	50
CM315-32.768KDZC-UT	32.768KHz	9pF	2.59	2.23	1.62
CM315-32.768KDZF-UT	32.768KHz	12.5pF	2.59	2.23	1.62
CM315-32.768KDZY-UT	32.768KHz	7pF	2.59	2.23	1.62
CM415-32.768KDZC-UT	32.768KHz	9pF	2.19	1.88	1.37
CM415-32.768KDZF-UT	32.768KHz	12.5pF	2.19	1.88	1.37
CM415-32.768KDZY-UT	32.768KHz	7pF	2.19	1.88	1.37
CM519-32.768KDZC-UT	32.768KHz	9pF	1.79	1.54	1.12
CM519-32.768KDZF-UT	32.768KHz	12.5pF	1.79	1.54	1.12
CM519-32.768KDZY-UT	32.768KHz	7pF	1.79	1.54	1.12

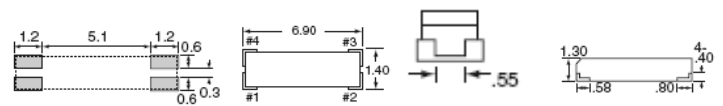
CM200S SERIES SMD 32.768KHZ CRYSTALS



Specifications: • Frequency: 32.768kHz • Frequency Tolerance: ± 20 ppm • Operating Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ • Storage Temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ • ESR: 50kΩ Max • Drive Level: $1\mu\text{W}$ Max. • Insulation Resistance: 500MΩ Min. • Aging (First Year): ± 3 ppm Max.

Cat No.	Frequency	Load Cap	Net Price Each		
			1	10	50
CM200S32.768KDZB-UT	32.768KHz	6pF	0.96	0.82	0.60
CM200S32.768KDZF-UT	32.768KHz	12.5pF	0.96	0.82	0.60

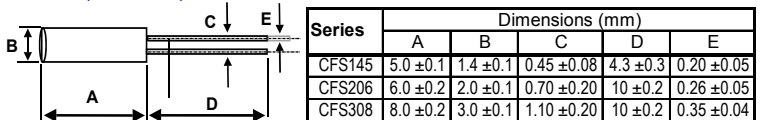
CM130 SERIES SMD 32.768KHZ CRYSTALS



Specifications: • Frequency: 32.768kHz • Operating Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ • Load Capacitance: 12.5pF • Drive Level: $1\mu\text{W}$ Max. • Frequency Tolerance: ± 20 ppm • ESR: 65kΩ

Cat No.	Frequency	Load Cap	Net Price Each		
			1	10	50
CM130-32.768KDZF-UT	32.768KHz	12.5pF	1.35	1.16	0.84

CFS145, CFS206, CFS308 THROUGH-HOLE 32.768 KHZ TUNING FORKS



Cat No.	Frequency	Load Cap	Net Price Each		
			1	10	50
CFS145-32.768KDZF-UB	32.768KHz	12.5pF	0.88	0.76	0.55
CFS206-32.768KDZB-UB	32.768KHz	6pF	0.32	0.28	0.20
CFS206-32.768KDZF-UB	32.768KHz	12.5pF	0.32	0.28	0.20
CFS308-32.768KDZF-UB	32.768KHz	12.5pF	0.32	0.28	0.20