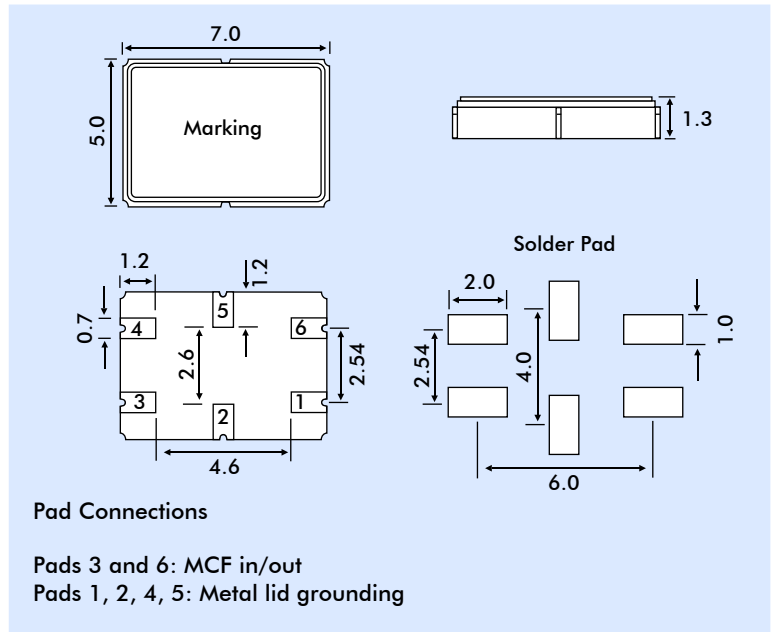


- Compact, micro-miniature and low mass.
- Excellent shock and vibration resistance
- Suitable for automatic pick and place
- 2 pole MCF

Package Information

Item	Material
Lid	Metal
Base	Ceramic
Sealing	Seam
Terminal	Tungsten (metallised)
Terminal Plating	Gold/Nickel (surface)/(under)
RoHS	Compliant (Pb-free)



Standard Specifications - 21.4MHz, 21.7MHz & 45.0MHz

Part Number	Nominal Frequency	Oscillation Mode	Passband Minimum		Stopband Maximum		Guaranteed Attenuation Min.		Ripple max.	Insertion Loss max.	Terminating Impedance	Temperature Range	Poles
	MHz		dB	kHz	dB	kHz	dB max.	kHz	dB	dB	Ω // pF	°C	
96SMF214A7.5A	21.4	FUND	3	±3.75	18	±25.0	70	-910	1.0	2.0	850//6.0	-30 to +80	2
96SMF214A7.5B	21.4	FUND	3	±3.75	18	±14.0	70	-910	1.0	2.0	870//6.0	-30 to +80	2
96SMF214A7.5C	21.4	FUND	3	±3.75	15	±12.5	60	-900	1.0	2.0	870//6.0	-30 to +80	2
96SMF214A12	21.4	FUND	3	±6.0	15	±20.0	70	-910	0.5	1.5	1200//2.0	-30 to +80	2
96SMF214A15A	21.4	FUND	3	±7.5	18	±25.0	70	-910	1.0	2.0	1500//1.5	-30 to +80	2
96SMF214A15B	21.4	FUND	3	±7.5	18	±25.0	70	-910	1.0	2.0	1500//2.0	-30 to +80	2
96SMF214A15C	21.4	FUND	3	±7.5	18	±25.0	70	-910	0.5	1.5	1500//2.5	-30 to +80	2
96SMF214A20	21.4	FUND	3	±10.0	15	±30.0	70	-910	1.0	2.0	1800//1.0	-30 to +80	2
96SMF214A30A	21.4	FUND	3	±15.0	15	±45.0	70	-910	1.0	2.0	2000//0.5	-30 to +80	2
96SMF214A30B	21.4	FUND	3	±15.0	15	±45.0	60	-910	1.0	2.0	2000//0.5	-30 to +80	2
96SMF217A7.5A	21.7	FUND	3	±3.75	20	±18.0	70	-910	1.0	2.0	850//6.0	-30 to +80	2
96SMF217A7.5B	21.7	FUND	3	±3.75	18	±14.0	70	-910	1.0	2.0	870//6.0	-30 to +80	2
96SMF217A7.5C	21.7	FUND	3	±3.75	15	±12.5	70	-910	1.0	2.0	850//3.5	-30 to +80	2
96SMF217A7.5D	21.7	FUND	3	±3.75	18	±12.5	50	-910	1.0	2.0	1500//6.0	-30 to +80	2
96SMF217A7.9	21.7	FUND	3	±3.95	18	±12.5	70	-910	1.0	2.0	850//8.0	-30 to +80	2
96SMF217A15A	21.7	FUND	3	±7.5	18	±25.0	70	-910	1.0	2.0	1500//2.5	-30 to +80	2
96SMF217A15B	21.7	FUND	3	±7.5	18	±25.0	70	-910	0.5	2.0	1500//1.5	-30 to +80	2
96SMF217A15C	21.7	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	1500//2.0	-30 to +80	2
96SMF450A7.5A	45.0	FUND	3	±3.75	10	±12.5	70	-910	1.0	2.0	200//4.0	-30 to +80	2
96SMF450A7.5B	45.0	FUND	3	±3.75	20	±25.0	70	-910	1.5	2.0	650//3.5	-30 to +80	2
96SMF450A12	45.0	FUND	3	±6.0	15	±20.0	70	-910	1.0	2.0	650//5.0	-30 to +80	2
96SMF450A15A	45.0	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	560//6.0	-30 to +80	2
96SMF450A15B	45.0	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	650//3.0	-30 to +80	2
96SMF450A15C	45.0	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	650//4.0	-30 to +80	2
96SMF450A15D	45.0	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	650//3.5	-30 to +80	2
96SMF450A15E	45.0	3rd	3	±7.5	15	±25.0	60	-910	0.5	1.5	2700//1.7	-30 to +80	2
96SMF450A20	45.0	FUND	3	±10.0	15	±35.0	70	-910	1.0	2.0	800//3.0	-30 to +80	2
96SMF450A25	45.0	FUND	3	±12.5	15	±50.0	70	-910	1.0	3.0	1000//2.0	-30 to +80	2
96SMF450A30A	45.0	FUND	3	±15.0	16	±60.0	70	-910	1.0	2.0	1100//0.0	-30 to +80	2
96SMF450A30B	45.0	FUND	3	±15.0	15	±60.0	65	-910	1.0	2.0	1200//1.8	-30 to +80	2
96SMF450A40	45.0	FUND	3	±20.0	15	±70.0	70	-910	1.0	2.0	1000//1.0	-30 to +80	2
96SMF450A48	45.0	FUND	3	±24.0	-	-	40	-910	1.0	2.0	1000//0.7	-30 to +80	2

Standard Specifications - Other Frequencies

Part Number	Nominal Frequency	Oscillation Mode	Passband Minimum		Stopband Maximum		Guaranteed Attenuation Min.		Ripple max.	Insertion Loss max.	Terminating Impedance	Temperature Range	Poles
	MHz		dB	kHz	dB	kHz	dB max.	kHz	dB	dB	Ω // pF	°C	
96SMF145A15	14.575	FUND	3	±7.5	13	±20.0	50	-910	0.5	2.0	2500//1.0	-30 to +80	2
96SMF204A5	20.480	FUND	3	±2.5	15	±10.0	70	-910	1.0	2.0	850//8.0	-30 to +80	2
96SMF212A15	21.250	FUND	3	±7.5	19	±25.0	70	-910	1.0	2.0	1500//2.5	-30 to +80	2
96SMF213A15	21.300	FUND	3	±7.5	18	±25.0	45	-150	1.0	2.0	1500//2.5	-30 to +80	2
96SMF213A15	21.325	FUND	3	±7.5	18	±25.0	45	-150	1.0	2.0	1500//2.5	-30 to +80	2
96SMF218A7.5	21.800	FUND	3	±3.75	15	±12.5	70	-910	1.0	2.0	850//6.0	-30 to +80	2
96SMF241A20	24.100	FUND	3	±10.0	10	±25.0	70	-910	1.0	2.0	1350//1.5	-30 to +80	2
96SMF245A20	24.555	FUND	3	±10.0	10	±25.0	70	-910	1.0	2.0	1350//1.5	-30 to +80	2
96SMF246A47	24.600	FUND	3	±23.5	-	-	40	-910	1.0	1.5	5000//0.0	-30 to +80	2
96SMF256A20	25.655	FUND	3	±10.0	10	±25.0	70	-910	1.0	2.0	1350//1.5	-30 to +80	2
96SMF260A20	26.000	FUND	1.5	±10.0	10	±25.0	75	-910	1.0	2.0	1300//1.5	-30 to +80	2
96SMF264A15	26.450	FUND	3	±7.5	15	±25.0	70	-910	1.0	2.0	1500//3.0	-30 to +80	2
96SMF270A24	27.000	FUND	3	±12.0	10	±25.0	70	-910	1.0	3.0	1000//1.6	-30 to +80	2
96SMF292A20	29.250	FUND	3	±10.0	10	±25.0	70	-910	1.0	1.5	1800//1.5	-30 to +80	2
96SMF300A40	30.000	FUND	1	±20.0	15	±125.0	30	-910	1.0	3.0	3800//0.4	-30 to +80	2
96SMF451A15	45.100	FUND	3	±7.5	15	±25.0	65	-910	1.0	2.0	560//6.0	-30 to +80	2
96SMF4515A15	45.150	FUND	3	±7.5	13	±25.0	70	-910	1.0	3.0	1000//4.0	-30 to +80	2
96SMF499A20	49.950	FUND	3	±10.0	13	±45.0	70	-910	1.0	3.0	800//2.0	-30 to +80	2
96SMF499A25	49.950	FUND	3	±12.5	13	±50.0	70	-910	1.0	3.0	800//1.5	-30 to +80	2
96SMF500A5	50.000	FUND	3	±2.5	15	±10.0	40	-1000	1.0	5.0	200//0.9	-30 to +80	2
96SMF768A8	76.800	3rd	3	±4.0	15	±13.0	50	-910	1.0	2.0	2000//0.4	-30 to +80	2
96SMF800A24	80.000	3rd	3	±12.0	15	±35.0	50	-910	1.0	2.0	2500//0.8	-30 to +80	2
96SMF900A30A	90.000	3rd	3	±15.0	16	±50.0	30	-910	0.5	3.0	3000//0.5	-30 to +80	2
96SMF921A6A	92.160	3rd	3	±3.0	30	±30.0	50	-910	1.0	3.0	2000//0.4	-30 to +80	2
96SMF921A6B	92.160	3rd	3	±3.0	30	±30.0	50	-910	1.0	3.0	1000//0.2	-30 to +80	2
96SMF100A20	100.000	3rd	3	±10.0	10	±28.0	50	-910	1.0	3.0	1500//0.8	-30 to +80	2
96SMF1001A14	100.100	3rd	3	±7.0	13	±28.0	50	-910	1.0	3.0	1500//0.3	-30 to +80	2
96SMF101A14	101.000	3rd	3	±7.0	13	±28.0	50	-910	1.0	3.0	1500//0.3	-30 to +80	2
96SMF105A14	105.000	3rd	3	±7.0	13	±28.0	50	-910	1.0	3.0	1500//1.0	-30 to +80	2
96SMF109A15	109.650	3rd	3	±7.5	18	±25.0	50	-910	1.0	3.0	1500//0.6	-30 to +80	2
96SMF109A24	109.650	3rd	3	±12.0	18	±60.0	65	-910	1.0	2.0	2000//1.1	-30 to +80	2
96SMF110A15	110.000	3rd	3	±7.5	18	±25.0	50	-910	1.0	3.0	1500//1.0	-30 to +80	2
96SMF122A7	122.880	3rd	6	±3.75	30	±40.0	50	-910	2.0	3.0	1000//1.6	-30 to +80	2
96SMF150A7	150.000	3rd	3	±3.5	15	±15.0	50	-910	1.0	7.0	1000//1.8	-30 to +80	2