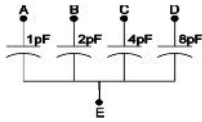
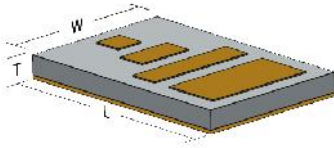


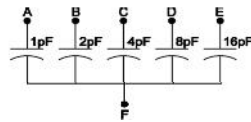
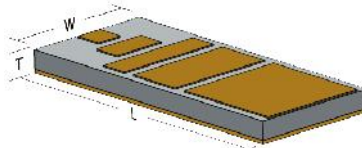
# M.O.S. CHIP CAPACITORS

## MSBIN SERIES

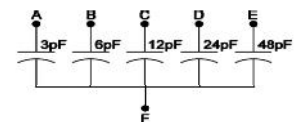
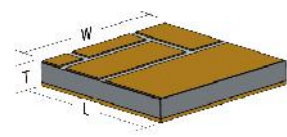
MSBIN 1, 2



MSBIN 3

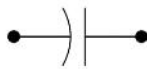
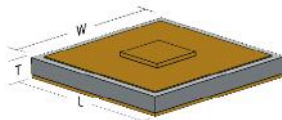


MSBIN 4

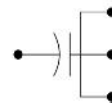
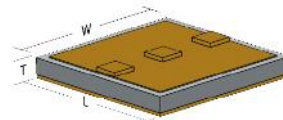


## MSCC SERIES

MSCC 2,3,4,15



MSCC 5



## GENERAL CHARACTERISTICS

Substrate	Silicon
Dielectric	Silicon Dioxide
Bond Pad	Gold (Standard), Aluminum (Optional)
Backside	Gold
TCC	+45 ±25ppm/°C
Operating Temperature Range	-55°C to +150°C
Dissipation Factor	1kHz, 1Vrms, 25°C, ≤0.1%
Q-Factor	1MHz, 50Vrms, 25°C, 1000 Min.
Insulation Resistance	≥10 <sup>12</sup> Ω

## PART NUMBER DESIGNATION

MSBIN	1	S	A	3R750	K	G
STYLE	TYPE	SUBSTRATE	DIELECTRIC	CAPACITANCE VALUE	TOLERANCE	OPTION
MSCC	See Table	S = Silicon	A = SiO <sub>2</sub>	<b>5-Digit Number:</b> 1st 4 digits are significant with "R" as decimal point when required. 5th digit represents number of zeros.	A = ±0.5pF* H = ±2.5% J = ±5% K = ±10% M = ±20% P = ±25%	E = Aluminum Pads G = Gold Bond Pads Std
MSBIN				<b>For MSBIN Series</b> 3R750 = 3.75pF MSBIN1 15R00 = 15pF MSBIN2 31R00 = 31pF MSBIN3 93R00 = 93pF MSBIN4	* Use for MSCC-2 4.7pF to 10pF or 2.3pF to 10pF for MSCC-15	

**EXAMPLE: MSBIN-1SA-3R750K -G**  
MSBIN-1 Series, Silicon, SiO<sub>2</sub>, 3.75pF Total Capacitance, ±10% Tol., Gold Bond Pads



## THIN FILM DIVISION

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# M.O.S. CHIP CAPACITORS

## MSBIN SERIES

Mini-Systems, Inc. **MSBIN** series thin film binary array chip capacitors are designed to established industry standards. The MSBIN series offer greater flexibility in capacitance value selection for Hybrid and Microwave circuits.

CASE SIZE	STYLE	TYPE	DIMENSIONS			TOTAL CAPACITANCE	INDIVIDUAL VALUES	TOLERANCE	RATED VOLTAGE
			L (±0.002") [±0.051mm]	W (±0.002") [±0.051mm]	T (±0.003") [±0.076mm]				
0203	MSBIN	1	0.019" [0.482]	0.030" [0.762]	0.010" [0.254]	3.75pF	0.25pF, 0.50pF, 1.0pF, 2.0pF	±25%	100VDC
0203	MSBIN	2	0.019" [0.482]	0.030" [0.762]	0.010" [0.254]	15pF	1pF, 2pF, 4pF, 8pF	±10%, ±20%	30VDC
0404	MSBIN	3	0.019" [0.482]	0.048" [1.219]	0.010" [0.254]	31pF	1pF, 2pF, 4pF, 8pF, 16pF	±10%, ±20%	75VDC
0505	MSBIN	4	0.044" [1.117]	0.044" [1.117]	0.010" [0.254]	93pF	3pF, 6pF, 12pF, 24pF, 48pF	±10%, ±20%	93VDC

## MSCC SERIES

Mini-Systems, Inc. **MSCC** series MOS thin film chip capacitors are designed to established industry standards. The MSCC series is offered in a variety of sizes for both Hybrid and Microwave circuits. Connection to associated circuitry is completed by wire-bonding to the top and epoxy or eutectic attachment to the back.

CASE SIZE	STYLE	TYPE	DIMENSIONS			CAPACITANCE RANGE	TOLERANCE
			L (±0.002") [±0.051mm]	W (±0.002") [±0.051mm]	T (±0.003") [±0.076mm]		
0101	MSCC	15	0.015" [0.381]	0.015" [0.381]	0.010" [0.254]	2.3pF to 10pF 11pF to 20pF 21pF to 30pF	±0.5pF ±5%, ±10%, ±2.5%, ±5%, ±10%
0202	MSCC	2	0.020" [0.508]	0.020" [0.508]	0.010" [0.254]	4.7pF to 10pF 11pF to 20pF 21pF to 70pF	±0.5pF ±5%, ±10%, ±2.5%, ±5%, ±10%
0303	MSCC	3	0.030" [0.762]	0.030" [0.762]	0.010" [0.254]	13pF to 200pF	±2.5%, ±5%, ±10%
0404	MSCC	4	0.040" [1.016]	0.040" [1.016]	0.010" [0.254]	25pF to 400pF	±2.5%, ±5%, ±10%
0505	MSCC	5	0.055" [1.397]	0.055" [1.397]	0.010" [0.254]	50pF to 1000pF	±2.5%, ±5%, ±10%

