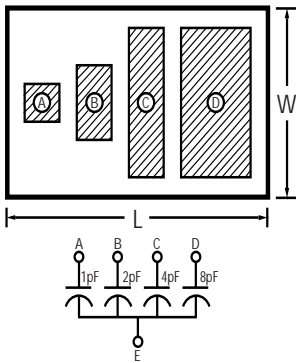


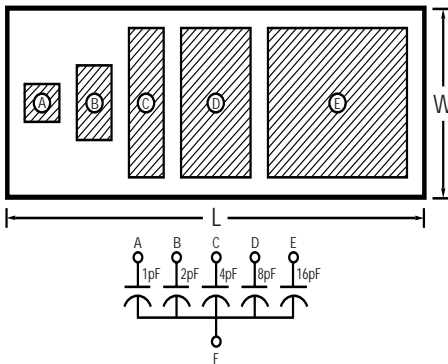
BINARY MOS CAPACITORS

MSBIN SERIES

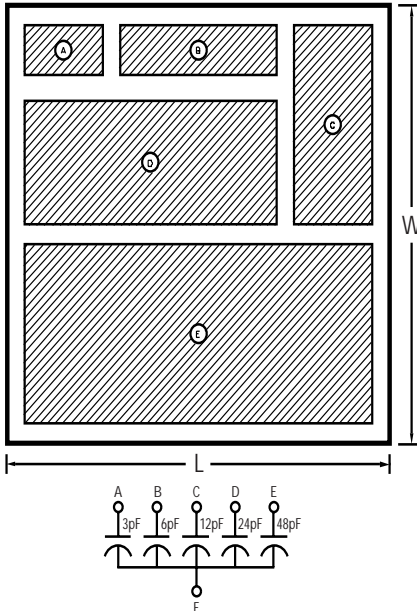
MSBIN-1, MSBIN-2



MSBIN-3



MSBIN-4



MSBIN Thin Film BINARY Capacitors have been designed to established industry standards. They offer great flexibility in capacitance value selection for Hybrid and Microwave circuits.

MSBIN-1

SIZE	0.019" x 0.030" (± 0.003) x 0.010" (± 0.001)
TOTAL CAPACITANCE	3.75pF
WORKING VOLTAGE	100 V DC
CAPACITANCE VALUES	0.25pF, 0.50pF, 1.0pF, 2.0pF
TOLERANCE	25%

MSBIN-2

SIZE	0.019" x 0.030" (± 0.003) x 0.010" (± 0.001)
TOTAL CAPACITANCE	15pF
WORKING VOLTAGE	30 V DC
CAPACITANCE VALUES	1pF, 2pF, 4pF, 8pF
TOLERANCE	10%, 20%

MSBIN-3

SIZE	0.019" x 0.048" (± 0.003) x 0.010" (± 0.001)
TOTAL CAPACITANCE	31pF
WORKING VOLTAGE	75 V DC
CAPACITANCE VALUES	1pF, 2pF, 4pF, 8pF, 16pF
TOLERANCE	10%, 20%

MSBIN-4

SIZE	0.044" x 0.044" (± 0.003) x 0.010" (± 0.001)
TOTAL CAPACITANCE	93pF
WORKING VOLTAGE	75 V DC
CAPACITANCE VALUES	3pF, 6pF, 12pF, 24pF, 48pF
TOLERANCE	10%, 20%

COMMON SERIES DATA

SUBSTRATE	SILICON
DIELECTRIC	SILICON OXIDE
BOND PAD	GOLD STANDARD; ALUMINUM OPTIONAL
BACKSIDE	GOLD, SUITABLE FOR EUTECTIC OR CONDUCTIVE EPOXY ATTACH
T.C.C.	+45ppm/ $^{\circ}$ C, ± 25 ppm/ $^{\circ}$ C
OPERATING TEMPERATURE RANGE	-55 $^{\circ}$ C TO +150 $^{\circ}$ C
DISSIPATION FACTOR Q	1KHz, 1Vrms, 25 $^{\circ}$ C, 0.1%
INSULATION RESISTANCE	MIL-STD 202, METHOD 106, Δ C:
MOISTURE RESISTANCE	± 1 pF OR 2% Δ C MAX., WHICHEVER IS GREATER
THERMAL SHOCK	MIL-STD 202, METHOD 107F, Δ C:
HIGH TEMPERATURE EXPOSURE	± 0.5 pF MAX., MSI TYPICAL ± 0.1 pF
SHORT TERM OVERLOAD	150 $^{\circ}$ C, 100 HRS., Δ C:
STABILITY	± 0.5 pF OR 1% Δ C MAX., WHICHEVER IS GREATER
	1.5X WORKING VOLTAGE, 5 SEC., Δ C:
	± 0.5 pF OR 1% Δ C MAX., WHICHEVER IS GREATER
	1000 HRS., 70 $^{\circ}$ C, @ WORKING VOLTAGE Δ C:
	± 2.5 pF OR ± 2.5 % MAX. Δ C, WHICHEVER IS GREATER

PART NUMBER DESIGNATION

MSBIN	X	SA	XXXX	X	X
SERIES	SIZE	TYPE	CAPACITANCE VALUE	TOL.	OPTION
	1		3R750 = 3.75pF MSBIN1	K = 10%	E = Aluminum Pads
	2		15R00 = 15pF MSBIN2	M = 20%	G = Gold Pads
	3		31R00 = 31pF MSBIN3	P = 25%	
	4		93R00 = 93pF MSBIN4		



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