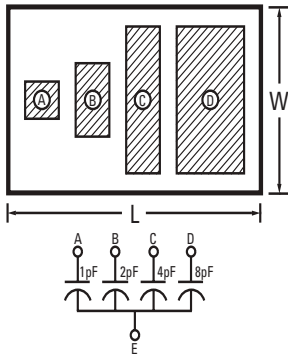


BINARY MOS CAPACITORS

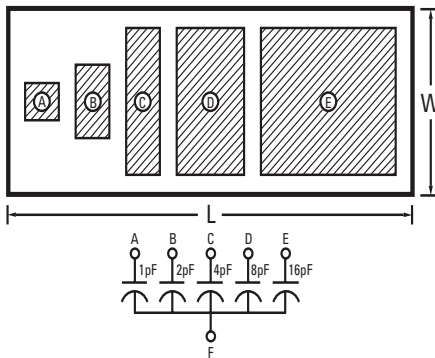
MSBIN SERIES

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.

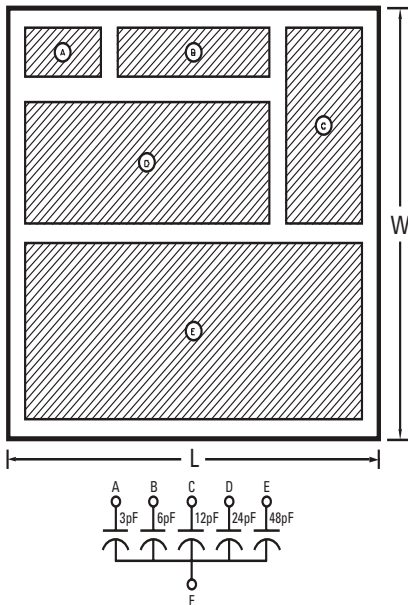
MSBIN-1, MSBIN-2



MSBIN-3



MSBIN-4



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 ATTATCH
T.C.C.	+45ppm/°C, ±25ppm/°C
OPERATING TEMPERATURE RANGE	-55°C TO +150°C
DISSIPATION FACTOR	1KHz, 1Vrms, 25°C, 0.1%
Q	1MHZ, 50Vrms, 25°C, 1000 MIN.
INSULATION RESISTANCE	@ WORKING VOLTAGE, 10 ⁹ Ω
MOISTURE RESISTANCE	MIL-STD 202, METHOD 106, Δ C: ±1pF OR 2% Δ C MAX., WHICHEVER IS GREATER MIL-STD 202, METHOD 107F, Δ C:
THERMAL SHOCK	±0.5pF MAX., MSI TYPICAL ±0.1pF 150°C, 100 HRS., Δ C:
HIGH TEMPERATURE EXPOSURE	±0.5pF OR 1% Δ C MAX., WHICHEVER IS GREATER 1.5X WORKING VOLTAGE, 5 SEC., Δ C:
SHORT TERM OVERLOAD	±0.5pF OR 1% Δ C MAX., WHICHEVER IS GREATER 1000 HRS., 70°C, @ WORKING VOLTAGE Δ C:
STABILITY	±2.5pF OR ±2.5% MAX. Δ C, WHICHEVER IS GREATER

PART NUMBER DESIGNATION

MSBIN	X	SA	XXXXX	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		

EXAMPLE: MSBIN4SA-93R00M-G = 0.044" x 0.044", Silicon Substrate, 93pF, ±20% Tol., Gold Pads

MSI
MINI-SYSTEMS, INC.
THIN FILM DIVISION
 20 DAVID ROAD, N. ATTLEBORO, MA 02780
 508-695-0203 FAX: 508-695-6076