

## M SERIES

Formerly sold as RS Components 124-XXX Series

### INTRODUCTION

SAHA Mica capacitors have been designed to meet the exacting physical, electrical and environmental requirements of the MIL-C-5 and RS-153 specifications. Careful selection of raw materials, starting with the finest available grade of India Ruby Mica, and the constant monitoring of all equipment and processes, provides an overall uniform level of quality consistent with today's most sophisticated electronic equipment. Ideal for Tuning, Timing, Filtering and Coupling Circuits.

### FEATURES

- Low loss and high stability
- Available in very close tolerances
- Suitable for precision applications
- Wide range of operating temperature

### GENERAL SPECIFICATIONS

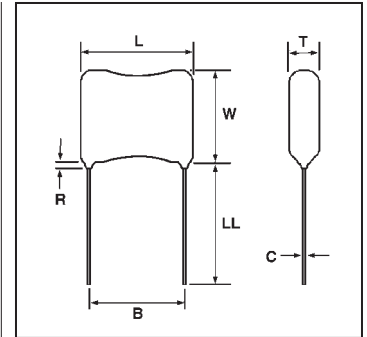
**CAPACITANCE RANGE:** 2.2 pF to 10,000 pF **VOLTAGE RATING:** 350 V DC (Higher voltage capacitors can also be custom made) **TEMPERATURE RATING:** - 55 to + 100 °C

**CASE SIZES:** M 6 to M 50 **INSULATION RESISTANCE:** 50,000 M Ohms minimum at 25°C for capacitance up to 10,000 pF. **DISSIPATION FACTOR:** <0.1 at 1 M Hz for values between 100 to 1,000 pF <0.2 at 1K Hz for values above 1,000 pF Please refer to characteristic curve for values above the range.

### LIFE TEST DETAILS:

Capacitors shall withstand 1.5 times the rated DC voltage at 85 °C for 2000 hours. After the test:

1. Capacitance change shall not exceed 1% of the initial value or 1 pF, whichever is greater.
2. Dissipation Factor shall be within 1.5 times the original limits.
3. Insulation Resistance shall meet the initial specified requirements.
4. There shall be no remarkable change in the appearance and the marking shall remain legible.



### DIMENSIONS:

LL = 6.3 mm (0.25") min.

### Note:

Please refer to DM series for Marking details, Temperature coefficient, General technical information and characteristic curves, etc.

TYPE	CAPACITANCE VALUE in pF	Dimensions in Millimeters					
		Lmax.	W max.	T max	R max.	B +1.0mm	C +1 mm
M - 6	22 - 68	12.70	8.00	3.60	2.00	8.00	0.50
M - 12	82 - 220	16.50	11.50	3.80	2.50	12.00	0.50
M - 37	270 - 560	27.00	17.00	3.80	3.00	19.50	0.60
M - 50	680 - 10000	27.00	22.00	3.80	3.00	19.50	0.60

TYPE	CAPACITANCE VALUE in pF	Dimensions in Inches					
		Lmax.	W max.	T max	R max.	B +0.04"	C +0.04"
M - 6	22 - 68	0.50	0.31	0.14	0.08	0.31	0.02
M - 12	82 - 220	0.65	0.45	0.15	0.10	0.47	0.02
M - 37	270 - 560	1.06	0.67	0.15	0.12	0.77	0.02
M - 50	680 - 10000	1.06	0.87	0.15	0.12	0.77	0.02