Type 103P

Vishay Sprague

Paper Capacitors
Metal Case, Film/Foil, 10 Ampere
Thru-Pass, Subminiature

FEATURES

- Bulkhead mounting
- Excellent RFI specifications
- Hermetically encased
- Low inductance connection
- Low insertion loss

PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55°C to + 125°C.

Capacitance Range: 0.001µF to 1.0µF.

Capacitance Tolerance: ± 20%, ± 10%.

Voltage Rating: 200 WVDC to 600 WVDC.

Current Rating: 10 ampere maximum.

Dissipation Factor: 1.0% maximum.

DC Resistance: 0.01 ohm maximum.

Voltage Test: 200% of rated voltage for 1 minute.

Insulation Resistance: At + 25°C: 20,000 Megohm - Microfarads or 30,000 Megohm minimum. At + 85°C: 200 Megohm - Microfarads or 300 Megohm minimum.

ENVIRONMENTAL CHARACTERISTICS

Vibration Test (Condition A): No mechanical damage, short, open or intermittent circuits.

DC Life Test: 140% of rated voltage for 250 hours @ + 125°C. No open or short circuits. No visible damage. Maximum Δ Cap.: ± 5%. Minimum I.R. = 30% of initial limit. Maximum D.F. = 1.5%.

Moisture Resistance: MIL-STD-202, Method 106E, 10 cycles. No visible damage. Maximum Δ Cap.: ± 5%. Minimum I.R. = 30% of initial limit. Maximum D.F. = 1.5%.

Thermal Shock and Immersion Cycling: No visible damage. Maximum Δ Cap.: ± 5%. Minimum I.R. = 30% of initial limit. Maximum D.F. = 1.5%.

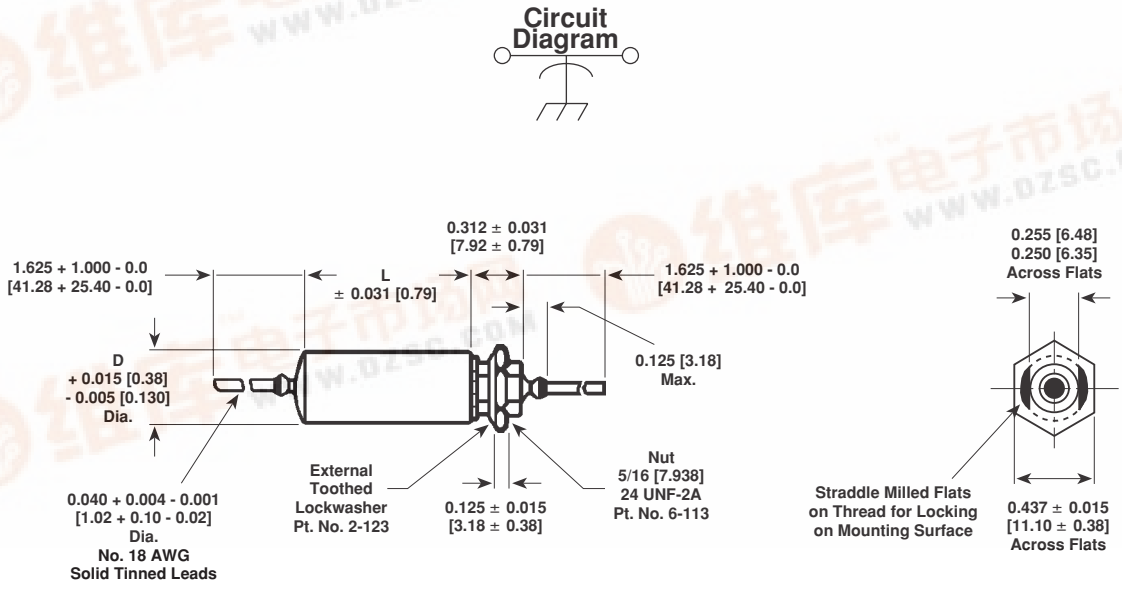
PHYSICAL CHARACTERISTICS

Lead Pull: 5 pounds (2.3 kilograms) for one minute. No physical damage.

Lead Bend: After three complete consecutive bends, no damage.

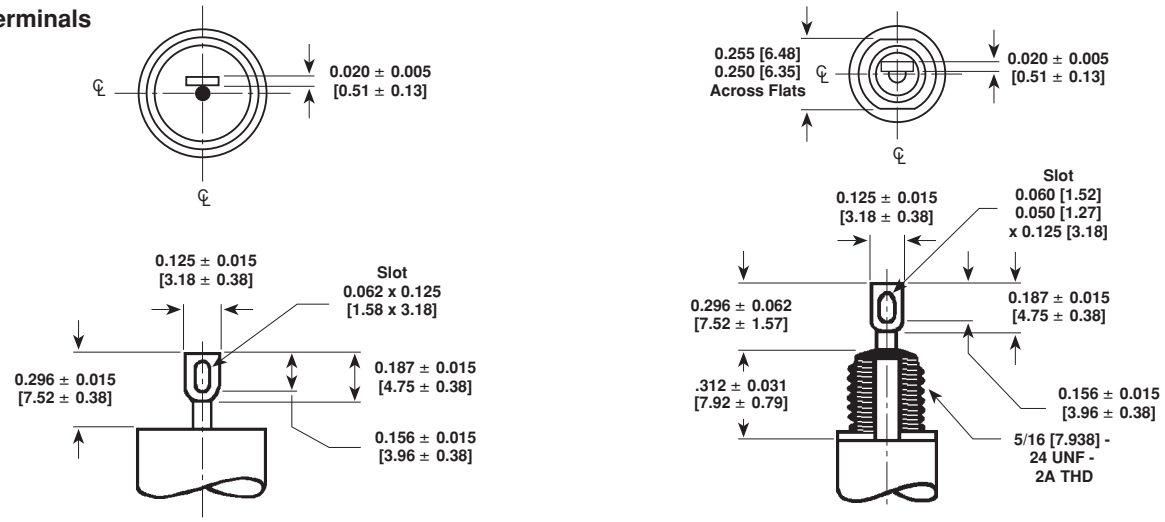
Marking: Sprague® trademark, type or part number, capacitance and voltage.

DIMENSIONS in inches [millimeters]



DIMENSIONS in inches [millimeters]

Tab Terminals



STANDARD RATINGS in inches [millimeters]

CAPACITANCE (μF)	PART NUMBER*		NOMINAL CASE SIZE D x L
	TAB TERMINAL	WIRE LEAD	
200 WVDC			
0.047	103P473X0200T	103P473X0200S	0.400 x 0.875 [10.16 x 22.23]
0.10	103P104X0200T**	103P104X0200S	0.400 x 1.125 [10.16 x 28.58]
0.22	103P224X0200T	103P224X0200S	0.562 x 1.125 [14.27 x 28.58]
0.47	103P474X0200T**	103P474X0200S	0.562 x 1.875 [14.27 x 47.63]
1.00	103P105X0200T	103P105X0200S	0.750 x 2.125 [19.05 x 53.98]
300 WVDC			
0.047	103P473X0300T	103P473X0300S	0.400 x 1.125 [10.16 x 28.58]
0.10	103P104X0300T	103P104X0300S	0.400 x 1.375 [10.16 x 34.93]
0.22	103P224X0300T	103P224X0300S	0.562 x 1.375 [14.27 x 34.93]
0.47	103P474X0300T	103P474X0300S	0.670 x 1.875 [17.02 x 47.63]
400 WVDC			
0.047	103P473X0400T	103P473X0400S	0.400 x 1.375 [10.16 x 34.93]
0.10	103P104X0400T**	103P104X0400S*	0.562 x 1.125 [14.27 x 28.58]
0.22	103P224X0400T**	103P224X0400S*	0.562 x 1.875 [14.27 x 47.63]
0.47	103P474X0400T	103P474X0400S	0.750 x 2.125 [19.05 x 53.98]
600 WVDC			
0.001	103P102X0600T	103P102X0600S	0.400 x 0.750 [10.16 x 19.05]
0.0047	103P472X0600T**	103P472X0600S*	0.400 x 0.750 [10.16 x 19.05]
0.01	103P103X0600T**	103P103X0600S*	0.400 x 0.750 [10.16 x 19.05]
0.047	103P473X0600T	103P473X0600S	0.400 x 1.375 [10.16 x 34.93]
0.10	103P104X0600T**	103P104X0600S*	0.562 x 1.375 [14.27 x 34.93]
0.22	103P224X0600T**	103P224X0600S*	0.670 x 1.875 [17.02 x 47.63]
0.47	103P474X0600T	103P474X0600S	0.750 x 2.375 [19.05 x 60.32]

* The Part Numbers given are for capacitance tolerance of ± 20%. To specify ± 10% tolerance, change X0 to X9.
** All standard inventoried Part Numbers will be stocked with a ± 10% tolerance (X9).

ORDERING INFORMATION

103P	473	X0	200	S
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING	TERMINAL
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	X0 = ± 20% X9 = ± 10% (Inventoried)	This is expressed in volts.	S = Wire Leads T = Soldering Tab