

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



### FEATURES

- Bulkhead mounting
- Excellent RFI specifications
- Hermetically enclosed
- 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%.

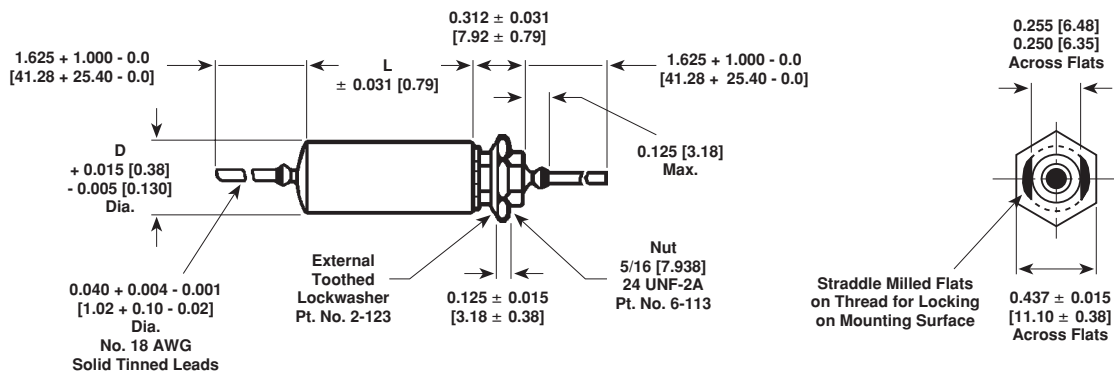
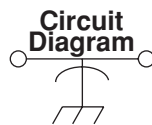
### PHYSICAL CHARACTERISTICS

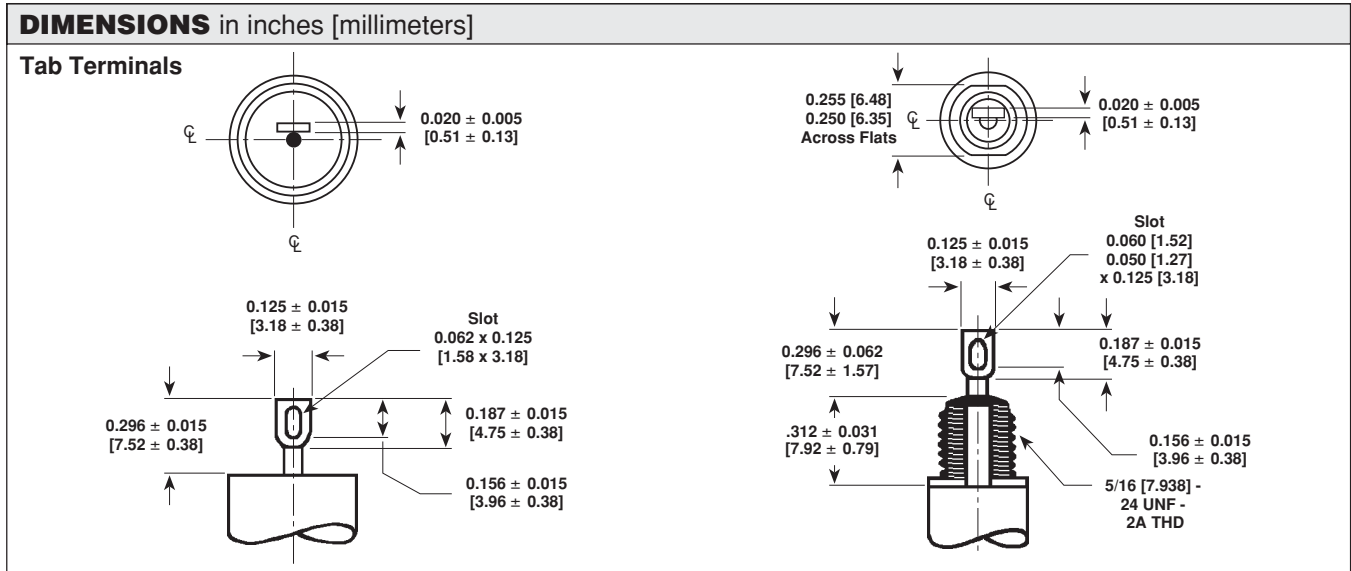
**Lead Pull:** 5 pounds (2.3 kilograms) for one minute. No physical damage.

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

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

### DIMENSIONS in inches [millimeters]





**STANDARD RATINGS** in inches [millimeters]

CAPACITANCE ( $\mu$ F)	PART NUMBER*		NOMINAL CASE SIZE D x L
	TAB TERMINAL	WIRE LEAD	
<b>200 WVDC</b>			
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]
<b>300 WVDC</b>			
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]
<b>400 WVDC</b>			
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]
<b>600 WVDC</b>			
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  $\pm 20\%$ . To specify  $\pm 10\%$  tolerance, change X0 to X9.

\*\* All standard inventoried Part Numbers will be stocked with a  $\pm 10\%$  tolerance (X9).

**ORDERING INFORMATION**

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



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