

## R-C Arc Suppressors ORANGE DROP®, Radial Lead



Contact Arc Suppression reduces field maintenance, premature equipment failure and RFI. A capacitor connected across the contacts helps in the solution of these problems but can cause contact welding and reduced equipment reliability. By adding a resistor in series with the capacitor, these additional problems are eliminated.

Because of the increased use of R-C combinations for Arc Suppressors and snubbers, Sprague® provides low cost Type 288P R-C Arc Suppressors in a single low profile package.

The standard ratings shown have those combinations of resistance and capacitance values most commonly required for low power applications.

The standard Type 288P R-C Arc Suppressors consist of a metallized polyester film capacitor in series with a low value 1/2 watt composition resistor. These units are supplied with radial leads for quick and easy installation.

The outer covering is a tough, conformal coating of epoxy resin for protection against heat and moisture. The Arc Suppressors are quite similar in appearance to the Type 225P Orange Drop® polyester film capacitors.

### PERFORMANCE CHARACTERISTICS

**Operating Temperature:** - 40 °C to + 85 °C

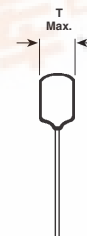
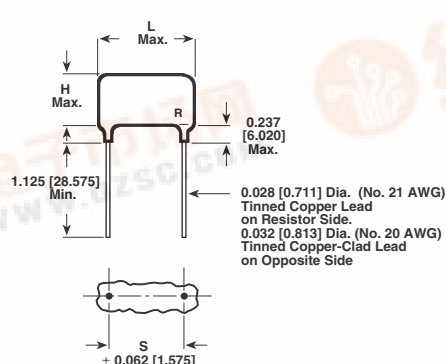
**Insulation Resistance:** When measured at + 25 °C, the insulation resistance shall exceed 10000 Megohm. Measurements shall be made after a 2 minute charge at rated DC voltage.

**Tolerance:** Standard tolerance is  $\pm 10\%$  for both the resistor and capacitor.

**Humidity Test:** Condition networks with no voltage applied for 72 hours at 95 % relative humidity and + 75 °C. Remove networks from humidity chamber, wipe surface dry of moisture and dry in circulating air for 4 hours. Measure insulation resistance at + 25 °C and rated DC voltage. The minimum insulation resistance shall be 5000 Megohm after test. Not more than one failure in 18 units tested shall be permitted.

**AC Operation:** The maximum permissible AC voltage to which these networks may be exposed is 250 volts rms. In no case should the sum of the DC and peak AC voltage applied to a network exceed the rated DC voltage.

### DIMENSIONS in inches (millimeters)



**STANDARD RATINGS AND DIMENSIONS** In inches [millimeters]

CAPACITANCE ( $\mu$ F)	RESISTANCE* ( $\Omega$ )	PART NUMBER	L (Length)	H (Height)	T (Thickness)	LEAD SPACING
400 VDC						
0.1	100	288P10494J101	1.000 [25.400]	0.63 [16.00]	0.46 [11.68]	0.691 [17.551]
0.1	470	288P10494J471	1.000 [25.400]	0.63 [16.00]	0.46 [11.68]	0.691 [17.551]
0.22	100	288P22494H101	1.125 [28.575]	0.59 [14.99]	0.37 [9.40]	0.817 [20.752]
0.22	470	288P22494H471	1.125 [28.575]	0.59 [14.99]	0.37 [9.40]	0.817 [20.752]
0.47	47	288P47494K470	1.437 [36.500]	0.63 [16.00]	0.41 [10.41]	1.129 [28.677]
0.47	100	288P47494K101	1.437 [36.500]	0.63 [16.00]	0.41 [10.41]	1.129 [28.677]

\* Standard resistor values are 47, 100 and 470 ohms. Other values are available by request.

**ORDERING INFORMATION**

288P TYPE	104 CAPACITANCE	9 TOLERANCE	4 DC VOLTAGE RATING AT + 85 °C	J CASE CODE	101 RESISTANCE	(-XXX) SPECIAL CONSTRUCTION
<div> <div>Capacitance is expressed in picofarads. The first two digits are significant. The third is the number of zeros to follow. Values must conform to decade rating for the tolerance specified.</div> <div>9 = <math>\pm 10\%</math></div> <div>This is expressed in hundred of volts. Example: 288P R5 = 50 volts.</div> <div>See Standard Ratings</div> <div>This is expressed in ohms. The first two digits are significant. The third is the number of zeros to follow.</div> <div>A three-digit suffix may be added by the factory to denote special construction.</div> </div>						

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