

Introduction and General Information

Vishay Sprague



ORANGE DROP®

INTRODUCTION

Quality electronic components have been manufactured at this plant since 1945. During World War II capacitors were produced for the highly secret V-T proximity fuse. About 1,000,000 capacitors were manufactured per week until VJ Day.

In 1959 the ORANGE DROP® name was first introduced. Film capacitors are conveniently wrapped using aluminum foil as the conductor. Dielectrics are polyester, polypropylene or polystyrene.

Today, as in the past, you can depend on us for leadership in high quality, reliable ORANGE DROP® film capacitors. These capacitors find broad engineering application in electronic circuitry, automobiles, ships, computers, televisions, power supplies, lasers, warning lights, control circuits, measurement instruments, communication systems, lighting circuits and medical electronic equipment.

GUIDE TO DIELECTRIC

TYPE	DIELECTRIC ELECTRODE	TEMPERATURE RANGE	TYPICAL DISSIPATION FACTOR + 25°C - 1000Hz	INSULATION RESISTANCE (Megohm X MFD)	
				+ 25°C	HI TEMP.
225P & 418P	Polyester Foil	- 55°C to + 125°C	.30%	25,000	25
715P	Polypropylene Foil	- 55°C to + 105°C	.05%	200,000	1000
716P	Polypropylene Foil	- 55°C to + 105°C	.05%	200,000	1000
PS	Polyester/Polypropylene Film	- 40°C to + 85°C	.30%/.05%	25,000/200,000	25/1000
287P	Polystyrene Foil	- 55°C to + 85°C	.025%	250,000	40,000
RC Network 288P	Metalized Polyester Resistor	- 40°C to + 85°C	—	10,000	1000

TYPE	OUTSTANDING PROPERTIES	APPLICATIONS
225P & 418P	High temperature, small size, high pulse current.	General purpose, coupling, decoupling.
715P	High current, good high frequency capability, high insulation resistance, close tolerance, high stability.	TV, ballast, switch mode power supplies, amplifiers, oscillators.
716P	Excellent high current, high frequency capability, high insulation resistance, high stability.	TV, ballast, switch mode power supplies, amplifiers, oscillators.
287P	High insulation resistance, low dielectric absorption, small capacitance change.	Telephone equipment, wave filters, oscillators.
RC Network 288P	Single, low profile package, self-healing.	Snubbers, switches and relays.

GENERAL INFORMATION

TYPE	DIELECTRIC	PROFILE	CAPACITANCE RANGE (μ F)	VOLTAGE RANGE	FEATURES/ APPLICATIONS
225P*	Polyester	Pressed	.001 to 1.0	100 VDC to 600 VDC 70 VAC to 200 VAC	Coupling-Decoupling Bypass applications
418P	Polyester	Round	.001 to 1.0	100 VDC to 1000 VDC 70 VAC to 200 VAC	Energy storage and discharge
715P*	Polypropylene	Round	.001 to .47	200 VDC to 1600 VDC 155 VAC to 500 VAC	Hi-current capability Close cap. tolerance
716P	Polypropylene	Pressed	.001 to 1.0	200 VDC to 1600 VDC 155 VAC to 500 VAC	Copper leads, ideal for Hi-pulse currents
715P High Voltage	Polypropylene	Round	.0006 to .022	1800 VDC to 2000 VDC 700 VAC to 800 VAC	See Introduction
717P High Voltage	Polypropylene	Pressed	.0006 to .022	1800 VDC to 2000 VDC 700 VAC to 800 VAC	See Introduction
PS	Polyester/ Polypropylene	Round	.001 to .5	200 VDC to 2000 VDC	Commercial Applications
287P	Polystyrene	Pressed	.0001 to .1	50 VDC and 100 VDC	Linear TCC, Close cap. tolerance
288P	Polyester	Pressed	.1/.22/.47	400 VDC/250 VAC	Arc-suppression, Snubber. Single, low profile package

The radial-lead ORANGE DROP® film capacitor is conformally coated with a flame retardant orange epoxy. Various capacitance tolerances, lead lengths and crimp styles are also available.

Note: The long established PS Distribution series of the ORANGE DROP® is also still readily available!

* Many 225P and 715P values are available as standard stock items through the Vishay/Sprague® distribution network.

However, please remember that any value can be ordered as a special if it is not a standard item.