

50VDC				
CAP (MFD)	T MAX	H MAX	L MAX	LS TYP
0.1	0.325" (8.3mm)	0.600" (15.2mm)	0.700" (17.8mm)	0.450" (11.4mm)

APPLICATIONS: SPECIFICALLY DESIGNED FOR APPLICATIONS IN HIGH FREQUENCY SWITCHING POWER SUPPLIES, THE 639 PROVIDES CRITICAL DAMPING AND REVERSE VOLTAGE PROTECTION FOR THE SCHOTTKY DIODE. THE LEAKAGE INDUCTANCE OF THE HIGH FREQUENCY POWER TRANSFORMER CAUSES RINGING OF THE REVERSE VOLTAGE WHEN DIODE CONDUCTION ABRUPTLY CEASES. THIS CAN CAUSE SCHOTTKY DIODE FAILURE. FIGURE 1 SHOWS THE SNUBBER USED ACROSS EACH DIODE. FIGURE 2 ILLUSTRATES THE VOLTAGE WAVE FORMS BEFORE AND AFTER THE 639 SNUBBERS WERE ADDED. PLEASE CONTACT THE FACTORY FOR AVAILABILITY OF OTHER VALUES, VOLTAGES, WATTAGES, AND/OR DIELECTRIC MATERIALS.

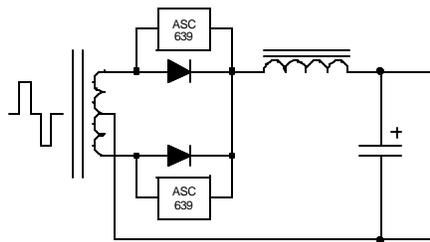


FIGURE 1: SNUBBER CIRCUIT

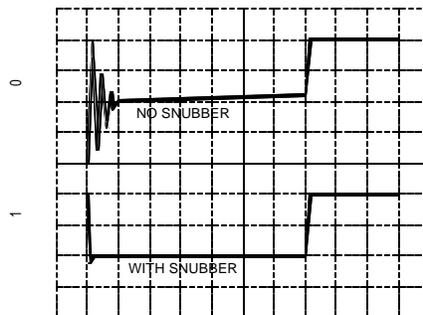


FIGURE 2: WAVEFORM WITH AND WITHOUT SNUBBER

GENERAL SPECIFICATIONS

PHYSICAL CHARACTERISTICS

CONSTRUCTION: NON-INDUCTIVE WOUND POLYESTER FILM AND FOIL.

CASE: FLAME RETARDANT TAPE WRAP CASE WITH EPOXY FILL.

LEAD MATERIAL: SOLDER COATED OR TINNED SOLID 0.024" TO 0.032" (0.6mm TO 0.8mm) DIAMETER (20 AWG MAXIMUM) WIRE.

DIMENSIONS: AS SPECIFIED IN TABLES.

ELECTRICAL CHARACTERISTICS

CAPACITANCE: AS SPECIFIED IN TABLES $\pm 20\%$ WHEN MEASURED AT OR REFERRED TO 1000 ± 20 Hz AND 25 ± 5 °C. OTHER CAPACITANCES AND TOLERANCES AVAILABLE UPON REQUEST.

RESISTOR: $3.9 \Omega \pm 10\%$, 1/2 WATT CARBON COMPOSITION OR METAL OXIDE RESISTOR. OTHER RESISTOR VALUES AND TYPES AVAILABLE UPON REQUEST.

DISSIPATION FACTOR: SHALL NOT BE GREATER THAN 1.8% WHEN MEASURED AT OR REFERRED TO 1000 ± 20 Hz AND 25 ± 5 °C.

INSULATION RESISTANCE: SHALL BE GREATER THAN 100,000 M Ω WHEN MEASURED AFTER 1 MINUTE ELECTRIFICATION AT 50VDC AND 25 ± 5 °C.

DIELECTRIC STRENGTH: 200% RATED VOLTAGE FOR 1 MINUTE THROUGH A LIMITING RESISTANCE OF 100 OHMS/VOLT AT 25 ± 5 °C.

RATED VOLTAGE: 50VDC.

TEMPERATURE: -55 °C TO +85 °C AT FULL RATED VOLTAGE OPERATIONAL TEMPERATURE, +105 °C MAX STORAGE TEMPERATURE.

ADDITIONAL INFORMATION

ORDERING INFORMATION: ALL ASC CAPACITORS ARE ORDERED BY "FAMILY CAP-TOL-VOLT" DESIGNATION. (I.E. TO ORDER A 639 0.1 μ F, $\pm 20\%$, 50VDC CAPACITOR, REQUEST PART NUMBER "639 .1-20-50")

SEE ALSO: "GENERAL INFORMATION - POLYESTER CAPACITORS" DOCUMENT FOR ADDITIONAL PHYSICAL, ELECTRICAL, AND PERFORMANCE CHARACTERISTICS NOT MENTIONED IN THIS FILE.

WARNING: INFORMATION ON THIS FILE IS SUBJECT TO CHANGE WITHOUT NOTICE AT ASC'S DISCRETION.

LAST MODIFIED: 09/26/01