

Type 945U Polypropylene, DC Link Capacitors

High Capacitance, Screw Terminal Case for Inverter Applications



Type 945U uses advanced metallized film technology to achieve long-life, high reliability in DC link applications. High voltage and high current ratings packaged in screw-terminal cases allow for replacement of series-parallel banks of aluminum electrolytic capacitors in high ripple current application. Suited for wind and solar power inverters.

Highlights

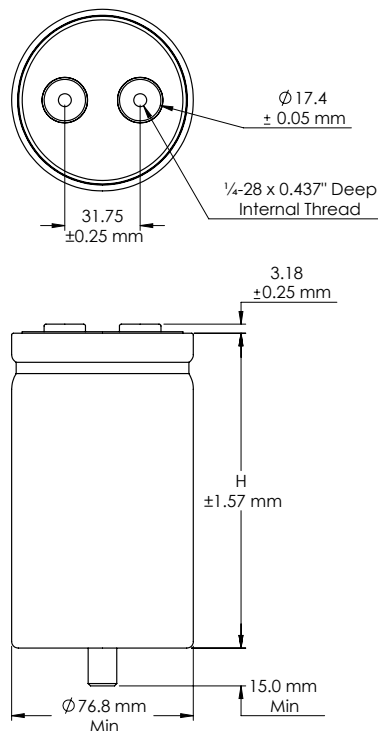
Advantages over Electrolytics

- Exceptionally Low ESR
- High Ripple Current
- Non-Polar
- High Voltage ratings
- Dry Construction - no Electrolyte

Specifications

Capacitance Range	65 to 500 μ F
Capacitance Tolerance	\pm 10% standard
Rated Voltage	600 to 1000 Vdc
Operating Temperature Range with Ripple	-55 $^{\circ}$ C to 85 $^{\circ}$ C
Maximum rms Current	47A @ 50 $^{\circ}$ C
Maximum rms Voltage	230 Vac
Test Voltage between Terminal @ 25 $^{\circ}$ C	130% rated DC voltage for 60 s
Test Voltage between Terminals & Case @ 25 $^{\circ}$ C	3 kVac @ 50/60 Hz for 60 s
Life Test	2000 h @ 85 $^{\circ}$ C, 125% rated voltage
Regulatory Information	

Dimensions



Construction Details

Case Material	Aluminum with Black PVC Sleeve
Resin Material	Dry Resin UL94V-0
Terminal Material	Tin Plated Brass

1/4 - 28 x 0.50" Round Head Screws provided

Shown with optional M12 Mounting Stud
Lock Washer and Hex Nut provided

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Part Numbering System

945U	171	K	601	D	B	I	S
Type	Capacitance	Tolerance	Voltage	Diameter D mm	Height H mm	Terminal	Mounting
945U	171 = 170 μ F 950 = 95 μ F 900 = 90 μ F	K = \pm 10%	601 = 600 Vdc 751 = 750 Vdc 901 = 900 Vdc 102 = 1000 Vdc	D = 76.8	B = 80.2 C = 105.2 E = 131.2 M = 156.2	I = ¼ - 28 Insert	blank = No Stud S = M12 Stud

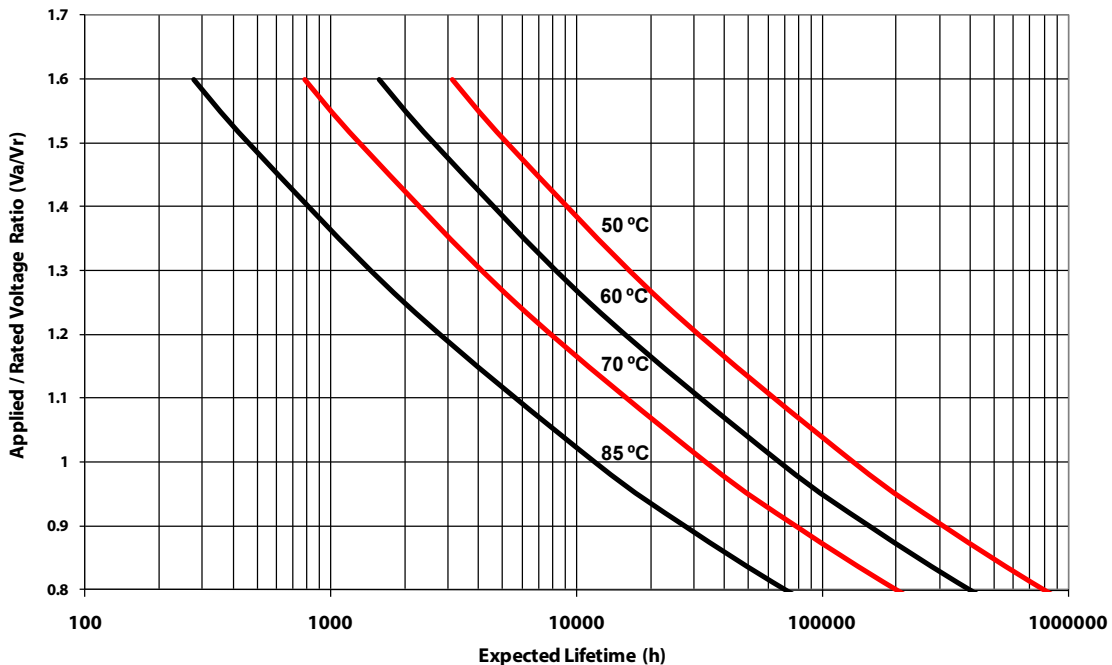
Ratings

NOTE: Other ratings, sizes and performance specifications are available. Contact us.

Catalog Part Number	Cap (μ F)	Rated Voltage (Vdc)	H Height mm	100kHz ESR (m Ω)	dV/dt (V/ μ s)	Max Irms 10 kHz 50 °C (A)
945U221K601DBI	220	600	80.2	4.0	30	47.0
945U301K601DCI	300	600	105.2	4.5	25	46.0
945U401K601DEI	400	600	131.2	5.0	26	44.0
945U501K601DMI	500	600	156.2	6.0	22	43.0
945U141K751DBI	140	750	80.2	4.5	30	44.0
945U191K751DCI	190	750	105.2	5.0	25	43.0
945U251K751DEI	250	750	131.2	6.0	37	42.0
945U321K751DMI	320	750	156.2	6.5	30	41.0
945U900K901DBI	90	900	80.2	5.0	42	42.0
945U131K901DCI	130	900	105.2	5.5	35	41.0
945U171K901DEI	170	900	131.2	6.5	43	40.0
945U221K901DMI	220	900	156.2	7.5	36	38.0
945U650K102DBI	65	1000	80.2	5.5	50	40.0
945U950K102DCI	95	1000	105.2	6.0	40	39.0
945U131K102DEI	130	1000	131.2	7.0	60	38.0
945U161K102DMI	160	1000	156.2	8.0	50	37.0

Typical Performance Curves

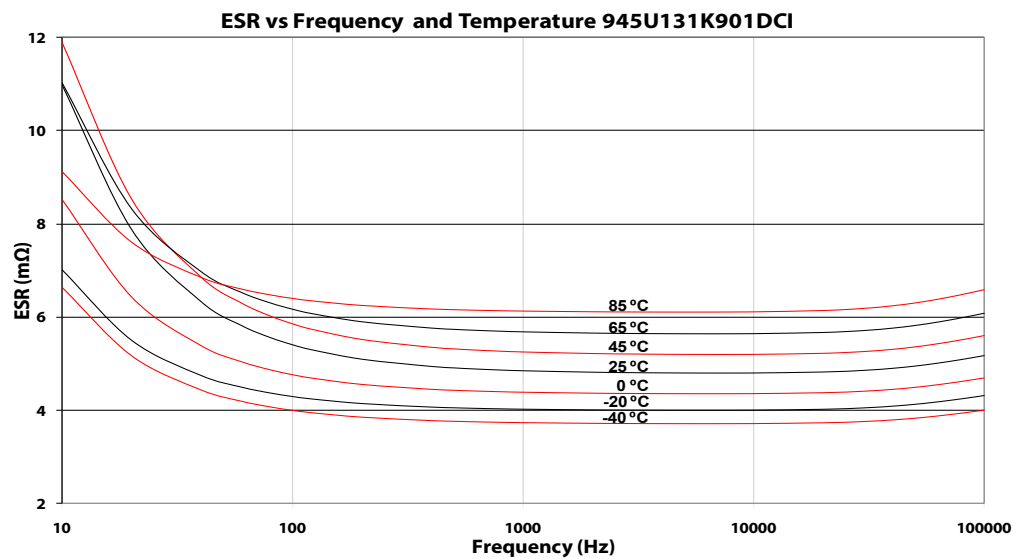
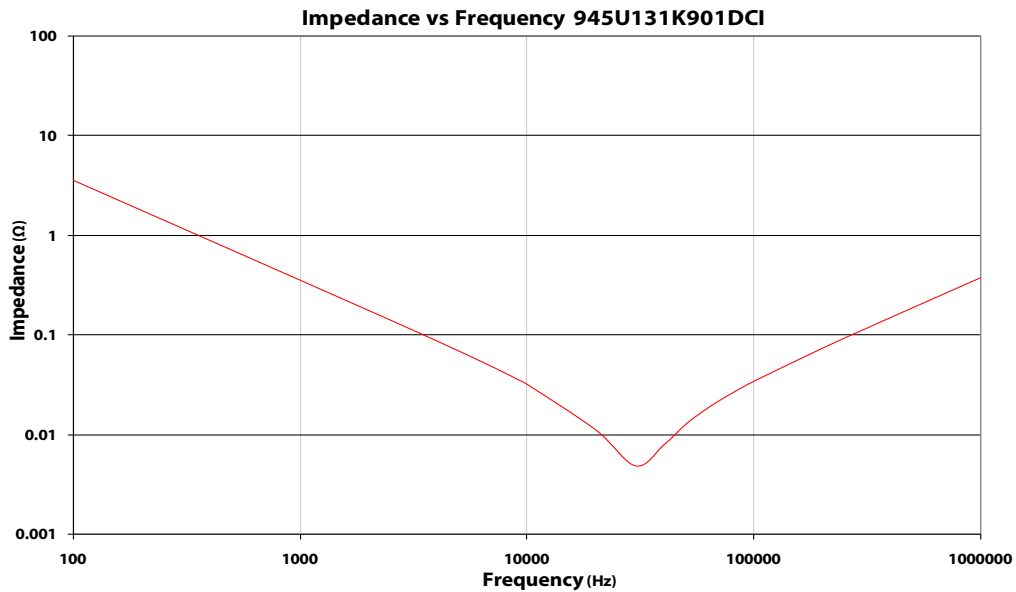
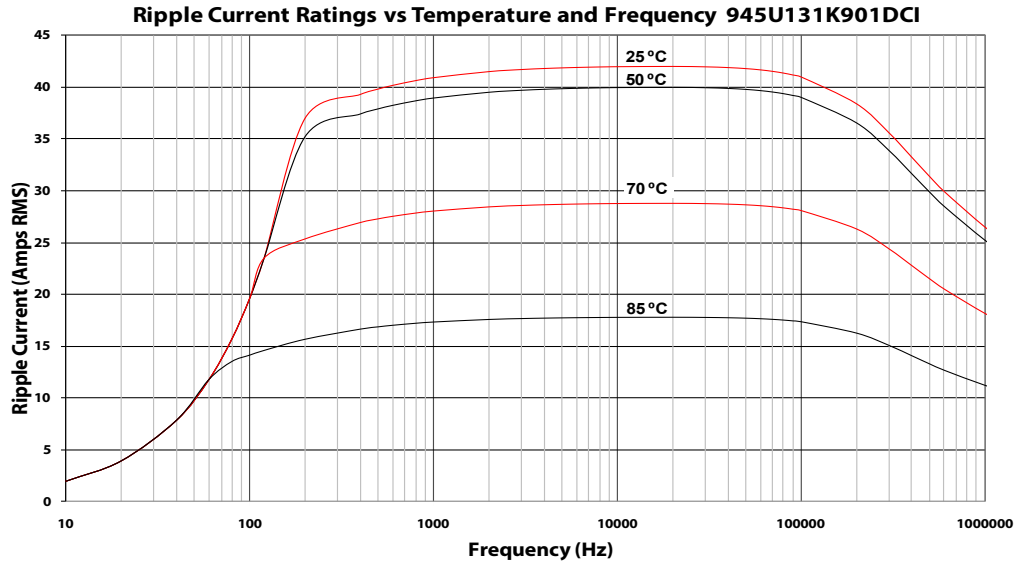
Expected Lifetime vs Core Temperature and Applied DC Voltage



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Typical Performance Curves



Type 945U High Current Screw Terminal Capacitors

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