TEXAS CAPACITOR

TEX-CAP® SERIES TWENTY MYLAR* AND FOIL

GENERAL SPECIFICATIONS

Temperature Range — −55°C to +85°C at rated voltage; to 125°C with 50% derating.

Insulation Resistance — Will equal or exceed 50,000 megohm-microfarads at 25°C, but the IR need not exceed 150,000 megohms.

Dielectric Strength — Will withstand the application of 150% rated voltage at 25°C for 60 seconds through a limiting resistance of 100 ohms/volt.

Dissipation Factor — Will not exceed 1.0% at 1000 ±20 cps and 25°C.

Life Test — Will withstand 125% of rated voltage at 85°C for 250 hours.

Winding Design — Non-inductive, extended foil.

Capacitance Tolerance — Standard tolerance, ±5%; also available in ±10%, ±3%, ±2% and ±1%.

		Capacitance Range	Voltage Range	Size
 TYPE 23 Round Hermetically Sealed Metal Case	Type 23 is designed for applications where the most stringent environmental conditions will be encountered. The Mylar*-and-foil winding is housed in a hermetically sealed metal case with glass end seals. The extremely high insulation resistance inherent in Mylar provides maximum voltage/capacitance ratings with minimum capacitor size.	.001 MFD thru 2.0 MFD	200 VDC, 400 VDC and 600 VDC	.193 D. x 5/16" L. thru 1.375 D. x 2 5/8" L.
 TYPE 24 Round Mylar* Tape-Wrapped	Type 24 consists of a Mylar*-and-foil winding wrapped with Mylar tape and end-filled with epoxy. This type encapsulation provides a reliable, smaller sized capacitor without reduction of voltage rating or insulation resistance. The Type 24 is an excellent economy capacitor designed for commercial use.	.001 MFD thru 2.0 MFD	200 VDC, 400 VDC and 600 VDC	.156 D. x 1/2" L. thru 1.400 D. x 1 1/2" L.
 TYPE 25 Round Epoxy-Encased	The Type 25 Mylar*-and-foil capacitor features a rugged skin-tight epoxy resin encasement. This design permits extremely small size combined with physical strength far exceeding metal and glass encasement.	.001 MFD thru 2.0 MFD	200 VDC, 400 VDC and 600 VDC	.175 D. x 11/16" L. thru 1.400 D. x 1 1/2" L.
 TYPE 27PE Printed-End Molded Epoxy Case	Type 27PE is an instrument-quality capacitor consisting of a Mylar*-and-foil winding enclosed within a molded epoxy resin case with printed end. This design permits wide variations in altitude and ambient pressure with little or no change in capacitance. The molded case is perfectly round and free of mold marks.	.001 MFD thru 2.0 MFD	200 VDC, 400 VDC and 600 VDC	.250 D. x 3/4" L. thru 1.500 D. x 1 1/2" L.

TEX-CAP® SERIES THIRTY METALIZED MYLAR*

GENERAL SPECIFICATIONS

Temperature Range — −55°C to +85°C at rated voltage; to 125°C with 50% derating.

Insulation Resistance — Will equal or exceed 15,000 megohm-microfarads at 25°C, but the IR need not exceed 60,000 megohms.

Dielectric Strength† — Will withstand the application of 150% rated voltage at 25°C for 60 seconds through a limiting resistance of 100 ohms/volt.

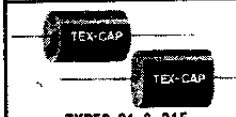
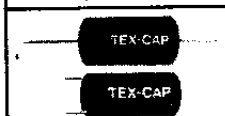
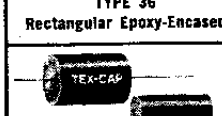
† Except Types 315 and 315F.

Dissipation Factor — Will not exceed 1.0% at 1000 ±20 cps and 25°C.

Life Test — Will withstand 125% of rated voltage at 85°C for 250 hours.

Winding Design — Non-inductive.

Capacitance Tolerance — Standard tolerance, ±5%; also available in ±10%, ±3% and ±2%.

		Capacitance Range	Voltage Range	Size
 TYPES 31 & 31F Epoxy-Encased (Round & Oval)	The subminiature Types 31 and 31F contain a winding of metalized Mylar* enclosed in a thin epoxy-dipped case. The thin covering, combined with the metalized-Mylar winding, provides a capacitor of smaller physical size with high moisture resistance, plus the "self-healing without carbonization" feature. This type of capacitor has excellent stability and life rating. Type 31 comes in a round case. Type 31F is oval-shaped.	.01 MFD thru 12.0 MFD	200 VDC, 400 VDC and 600 VDC	Type 31 .200 D. x 3/16" L. thru 1.250 D. x 2 1/4" L. Type 31F .225 W. x .125 T. x 3/16" L. thru 1.450 W. x .875 T. x 2 1/4" L.
 TYPE 34 Round Mylar* Tape-Wrapped	Tex-Cap Type 34 consists of a metalized-Mylar winding wrapped with Mylar tape and end-filled with epoxy. This type of encapsulation provides a reliable smaller sized capacitor without reduction of voltage rating or insulation resistance. The Type 34 is an excellent economy capacitor designed for commercial use.	.01 MFD thru 12.0 MFD	200 VDC, 400 VDC and 600 VDC	.200 D. x 3/16" L. thru 1.250 D. x 2 1/4" L.
 TYPES 35 & 35PE Molded Epoxy Case (Axial & Printed-End)	Tex-Cap Types 35 and 35PE metalized-Mylar* capacitors are enclosed in a molded epoxy-resin case. This molded case, perfectly round and free of mold marks, provides rigidity plus the ability to withstand wide variations in altitude and ambient pressures with little or no change in capacitance. The metalized-Mylar winding facilitates smaller size and self-healing without carbonization. Type 35 has axial leads, whereas Type 35PE is of printed-end construction.	.01 MFD thru 10.0 MFD	200 VDC, 400 VDC and 600 VDC	.250 D. x 3/16" L. thru 1.000 D. x 2 1/4" L.
 TYPE 36 Rectangular Epoxy-Encased	Tex-Cap Type 36 metalized-Mylar* film capacitors are enclosed in a premolded rectangular epoxy case. These units have a good capacity-versus-volume factor along with good dimensional uniformity. Voltage ratings for Type 36 are 50-100, 200, 400 and 600 vdc.	.01 MFD thru 8.0 MFD	50-100 VDC, 200 VDC, 400 VDC and 600 VDC	.29 W. x .17 T. x .57" L. thru .72 W. x .56 T. x 1.92" L.
 TYPES 315 & 315F Epoxy-Encased (Round & Oval)	Tex-Cap Types 315 and 315F capacitors are designed especially for transistor and other low-voltage subminiature applications. The ultra-thin metalized-Mylar* winding, encased in a thin epoxy-dipped case, is rated at 50 or 100 vdc. The thermo-setting epoxy end-fill seals out moisture, assuring a long, dependable life. Type 315 is tubular-shaped. Oval-shaped Type 315F is available for maximum space economy.	.01 MFD thru 20.0 MFD	50 VDC and 100 VDC	Type 315 .150 D. x 1/2" L. thru 1.200 D. x 1 1/4" L. Type 315F .250 W. x .190 T. x 1/2" L. thru 1.100 W. x .850 T. x 1 1/4"

*DuPont Trademark

TEXAS CAPACITOR 1976

TEX-CAP® SERIES FORTY TEFLON* AND FOIL

GENERAL SPECIFICATIONS

Insulation Resistance — Will equal or exceed 100,000 megohm-microfarads at +25°C, but the IR need not exceed 1,000,000 megohms.

Dissipation Factor — Will not exceed 0.1% at 1000 ±20 cps and 25°C.

Dielectric Strength — Will withstand the application of 200% rated voltage at +25°C for 60 seconds through a limiting resistance of 100 ohms/volt.

Voltage Range — 200, 400 and 600 volts DC.

Capacitance Tolerance — Standard tolerance, ±5%; also available in ±10%, ±3%, ±2% and ±1%.

Winding Design — Non-inductive, extended foil.

Temperature Range —

Type 43 and Type 200GGS — −55°C at rated voltage without derating

Type 45 — −55°C to +165°C at rated voltage; to 200°C with 33% derating.

		Capacitance Range	Voltage Range	Size
 TYPE 43 Round Hermetically Sealed Metal Case	Type 43 is a Teflon*-and-foil capacitor housed in a hermetically sealed metal case with glass end seals. The use of Teflon dielectric permits excellent performance at temperatures up to 200°C without derating. This type is designed primarily for equipment where extra reliability is required in extreme temperatures. Leads are attached with solder that will not soften at temperatures well over 250°C.	.001 MFD thru 1.50 MFD	200 VDC, 400 VDC and 600 VDC	.235 D. x 7/8" L. thru 1.375 D. x 2" L.
 TYPE 45 Round Hi-Temp Epoxy Case	The Type 45 Teflon*-and-foil capacitor is encased in molded heat-resistant epoxy resin. The use of Teflon dielectric permits excellent performance without derating at temperatures up to 165°C. Extended foil construction, with leads securely attached to each turn of foil, insures a non-inductive "straight through" path for alternating current.	.001 MFD thru .82 MFD	200 VDC, 400 VDC and 600 VDC	.250 D. x 3/4" L. thru 1.000 D. x 2" L.
 TYPE 200GGS	The Tex-Cap Type-200GGS is a TFE-Fluorocarbon (Teflon) Dielectric Film Capacitor, housed in a nickel plated tubular non-ferrous metal case with compression glass end seals.	.001 MFD thru .68 MFD	200 VDC, 400 VDC and 600 VDC	.235 D. x 23/32" L. thru 1.00 D. x 2 5/16" L.

TEX-CAP® SERIES SEVENTY METALIZED POLYCARBONATE

GENERAL SPECIFICATIONS

Temperature Range — −55°C to +125°C with full rated voltage.

Insulation Resistance — Will equal or exceed 50,000 megohm-microfarads at 25°C, but the IR need not exceed 250,000 megohms.

Dielectric Strength — Will withstand the application of 150% rated voltage at 25°C for 60 seconds through a limiting resistance of 100 ohms/volt.

Winding Design — Non-inductive.

Dissipation Factor — Will not exceed 0.5%, or 1.0% for units greater than 10.0 mfd., at 1000 ±20 cps and 25°C.

Life Test — Will withstand 140% of rated voltage at 125°C for 250 hours.

Capacitance Tolerance — Standard tolerance, ±5%.

Vibration — Will meet or exceed the requirements of MIL-STD-202B, Method 204A.

		Capacitance Range	Voltage Range	Size
 TYPES 71 & 71F Epoxy-Encased (Round & Oval)	Tex-Cap Types 71 and 71F metalized polycarbonate capacitors are enclosed in a thin, skin-tight epoxy-dipped case. They combine rugged design, low dielectric absorption, low dissipation factor, high insulation resistance and high dielectric strength, along with a higher stability than was available previously. Type 71 comes in a round case. Type 71F is oval-shaped.	.001 MFD thru 10.0 MFD	50 VDC, 100 VDC, 200 VDC, 400 VDC and 600 VDC	Type 71 .175 D. x 3/16" L. thru 1.400 D. x 2" L. Type 71F .22 W. x .12 T. x 3/16" L. thru 1.67 W. x 1.06 T. x 2" L.
 TYPE 73 Round Hermetically Sealed Metal Case	Type 73 is a metalized polycarbonate capacitor housed in a hermetically sealed metal tube with glass end seals. This provides the ultimate in moisture resistance characteristics for this type of dielectric. Type 73 is recommended in circuit applications where there is limited space and electrical characteristics must approach that of polystyrene or Teflon capacitors.	.001 MFD thru 10.0 MFD	50 VDC, 100 VDC, 200 VDC, 400 VDC and 600 VDC	.235 D. x 5/8" L. thru 1.000 D. x 2 1/16" L.
 TYPES 74 & 74F Mylar* Tape-Wrapped (Round & Oval)	Tex-Cap Types 74 and 74F metalized polycarbonate capacitors are encased in a jacket of high-temperature film with the ends epoxy-sealed. This provides moisture resistance exceeding most military specifications for non-hermetically sealed units. The size factor is decreased 35% over polycarbonate-and-foil units. Type 74 comes in a round case. Type 74F is oval-shaped.	.001 MFD thru 10.0 MFD	50 VDC, 100 VDC, 200 VDC, 400 VDC and 600 VDC	Type 74 .156 D. x 5/16" L. thru 1.380 D. x 2.0" L. Type 74F .21 W. x .10 T. x 5/16" L. thru 1.66 W. x 1.04 T. x 2" L.
 TYPE 75 Round Molded Epoxy Case	Type 75 is a metalized polycarbonate capacitor encased in a pre-molded round epoxy case. This rugged encasement provides rigidity plus the ability to withstand wide variations in altitude and ambient pressure changes. Type 75, therefore, is well suited for airborne applications.	.001 MFD thru 10.0 MFD	50 VDC, 100 VDC, 200 VDC, 400 VDC and 600 VDC	.250 D. x 5/8" L. thru 1.000 D. x 2" L.
 TYPE 76 Rectangular Molded Epoxy Case	Tex-Cap Type 76 is a metalized polycarbonate capacitor encased in a pre-molded rectangular epoxy case. This encasement provides maximum packaging density along with rugged construction which exceeds most military specifications and humidity requirements.	.01 MFD thru 5.0 MFD	50 VDC, 100 VDC, 200 VDC, 400 VDC and 600 VDC	.29 W. x .17 T. x .57" L. thru .72 W. x .56 T. x 1.92" L.

*DuPont Trademark