

### Part Number & Ordering Information

#### Marking

- Style
- Capacitance & Tolerance
- Voltage
- Logo
- Date Code
- (Order of markings may vary depending on size of the capacitor).

### General Information

Disc capacitors are designed and manufactured under strict quality control guidelines in order to insure performance and reliability for high voltage applications.

Double action pressing is utilized to minimize density gradients and produce uniform fired ceramic density.

Capacitors are available screened to Mil-Prf-49467 established reliability specification (except corona). Contact factory if corona testing is required.

### Testing & Screening Information

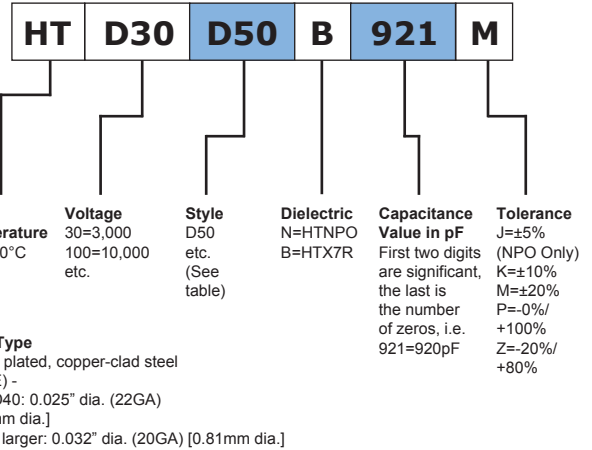
- Dielectric Withstanding Voltage to Mil-Prf-49467, Mil-Std-202, MTD 302.
- Insulation Resistance 25°C to Mil-Prf-49467, Mil-Std-202, MTD 302.
- Capacitance/Dissipation Factor to Mil-Prf-49467, Mil-Std-202, MTD 305.

### Installation

Higher-voltage parts may require further encapsulation to prevent surface breakdown. Parts should be cleaned and oven dried at 85°C before further encapsulation. Silicone rubbers or an epoxy may be used. De-airing of encapsulates is recommended.

During installation soldering we recommend attaching a heat sink to the lead between the soldering iron and capacitor. Components should be preheated to approximately 120°C prior to heat sink attachment.

Testing higher-voltage parts before encapsulation may be done in a suitable dielectric fluid such as FC-40.



VOLTAGE RATING (KV)	MAX THICKNESS INCHES [MM]
3	.210 [5.33]
5	.250 [6.35]
7.5	.310 [7.87]
10	.365 [9.27]
15	.475 [12.07]
20	.575 [14.61]

SPECIFICATIONS	DIELECTRIC TYPE (EIA DESIGNATION)	
	HTNPO	HTX7R
TEMPERATURE RANGE	-55°C to 200°C	-55°C to 200°C
TEMPERATURE COEFFICIENT	± 30 ppm/°C	±15%
VOLTAGE RANGE	3kV to 20kV	3kV to 20kV
DIELECTRIC WITHSTANDING VOLTAGE TEST	3kV to 20kV 1.5x rated	3kV to 20kV 1.5x rated
IR @ 25°C	100,000MΩ or 1,000MΩ - μF whichever is less	100,000MΩ or 1,000MΩ - μF whichever is less
IR @ EVALUATED TEMPERATURE	1,000MΩ or 10MΩ - μF whichever is less @ 200°C	1,000MΩ or 10MΩ - μF whichever is less @ 200°C
DISSIPATION FACTOR @ 1kHz, 25 °C	0.1% max	2.5% max
AGING RATE	0	-2% max/decade hour

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200°C High Voltage Disc Ceramic Capacitors						
Disc STYLE	D Max.	S ± .030	NPO (PF)		X7R (PF)	
			Min.	Max.	Min.	Max.
<b>3kVDC</b>						
D30	.30	.250	8.4	12	260	350
D40	.40	.250	12	24	380	730
D50	.50	.375	28	46	870	1400
D60	.60	.375	38	61	1200	1900
D70	.70	.500	63	95	2000	2900
D80	.80	.500	94	110	2900	3500
D90	.90	.500	110	160	3500	5000
D100	1.00	.500	150	200	4700	6200
D120	1.20	.500	200	310	6200	9500
D140	1.40	.625	310	350	9600	12000
<b>5kVDC</b>						
D30	.30	.250	5.1	6.9	150	210
D40	.40	.250	7.3	15	230	440
D50	.50	.375	17	28	520	860
D60	.60	.375	23	37	700	1100
D70	.70	.500	38	57	1200	1800
D80	.80	.500	57	69	1800	2100
D90	.90	.500	69	97	2100	3000
D100	1.00	.500	92	120	2900	3700
D120	1.20	.500	120	180	3800	5700
D140	1.40	.625	190	230	5800	7000
<b>7.5kVDC</b>						
D30	.30	.250	3.4	4.6	100	150
D40	.40	.250	5.0	9.6	150	300
D50	.50	.375	12	19	350	580
D60	.60	.375	15	25	470	750
D70	.70	.500	25	38	780	1200
D80	.80	.500	37	46	1200	1400
D90	.90	.500	45	65	1400	2000
D100	1.00	.500	60	80	1900	2500
D120	1.20	.500	80	120	2500	3800
D140	1.40	.625	120	150	3800	4700
<b>10kVDC</b>						
D30	.30	.250	2.5	3.5	78	110
D40	.40	.250	3.8	7.2	110	220
D50	.50	.375	8.5	14.0	260	430
D60	.60	.375	12	18	350	560
D70	.70	.500	19	28	580	880
D80	.80	.500	28	34	870	1100
D90	.90	.500	34	48	1000	1500
D100	1.00	.500	46	60	1400	1800
D120	1.20	.500	60	93	1900	2800
D140	1.40	.625	94	110	2900	3500
<b>15kVDC</b>						
D30	.30	.250	1.6	2.3	52	71
D40	.40	.250	2.4	4.8	76	150
D50	.50	.375	5.7	9.4	180	290
D60	.60	.375	7.7	12	230	370
D70	.70	.500	12	20	390	590
D80	.80	.500	19	23	580	710
D90	.90	.500	23	32	690	1000
D100	1.00	.500	30	40	950	1200
D120	1.20	.500	40	60	1300	1900
D140	1.40	.625	60	77	1900	2300
<b>20kVDC</b>						
D30	.30	.250	1.4	1.7	42	52
D40	.40	.250	2.0	3.5	62	100
D50	.50	.375	4.6	6.8	140	210
D60	.60	.375	6.2	8.9	190	270
D70	.70	.500	10	14	310	430
D80	.80	.500	15	17	470	520
D90	.90	.500	18	23	560	720
D100	1.00	.500	24	30	760	900
D120	1.20	.500	32	45	1000	1400
D140	1.40	.625	50	56	1600	1700

Custom voltages, sizes, and capacitance values are available. Contact Factory.