

IGBT SNUBBER CAPACITORS METALIZED POLYPROPYLENE FILM DIELECTRIC CAPACITORS



FEATURES

- Low ESL and ESR
- Voltage ratings to 3,000 VDC / 920 VRMS
- Ripple current greater than 20 ARMS @ 85°C
- Across the bus 23 - 28 mm terminal spacing
- 105°C operating temperature
- dv / dt Capabilities to 3,300 V / μ s

MAJOR APPLICATIONS:

Snubber, industrial controls, AC drives and inverters, UPS, charging systems, and other high voltage electronic applications.

PHYSICAL CHARACTERISTICS

CONSTRUCTION:

Non-inductive wound metalized polypropylene.

CASE:

Flame retardant molded plastic case and epoxy fill.

DIMENSIONS (in inches):

Case	Length	Width	Height
1	1.65	1.25	1.25
2	1.77	1.46	1.46

TERMINALS:

Tinned copper tabs.

MARKING:

Dearborn trademark, type or catalog number, capacitance, tolerance and voltage.

ELECTRICAL SPECIFICATIONS

CAPACITANCE RANGE:

0.10 μ F to 2.5 μ F

CAPACITANCE TOLERANCE:

\pm 20%, \pm 10%, \pm 5%

VOLTAGE RANGE:

- 800 VDC to 3,000 VDC
- 460 VRMS to 920 VRMS

VOLTAGE DERATING:

At +105°C, 70% of the 85°C rating

OPERATING TEMPERATURE:

- -55°C to +105°C for DC operation
- -55°C to +85°C for AC operation

DISSIPATION FACTOR:

0.10% maximum

EQUIVALENT SERIES INDUCTANCE:

< 26nH

EQUIVALENT SERIES RESISTANCE:

See standard ratings table

DC VOLTAGE TEST:

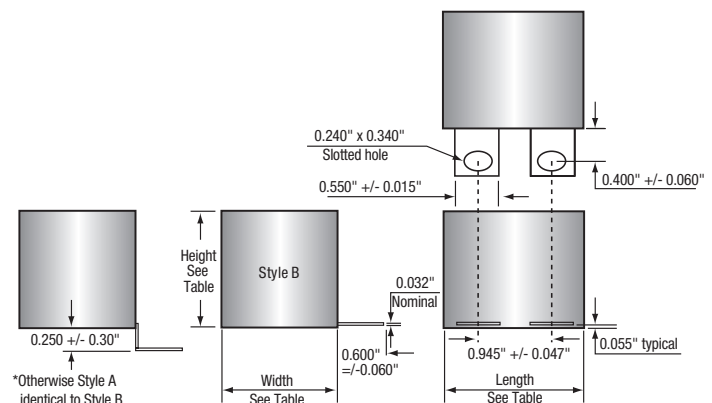
150% of rated voltage for 2 minutes

INSULATION RESISTANCE:

Measure at 500 VDC after a 2 minute charge.

- At +25°C, 175,000 Megaohm-Microfarads, need not exceed 350,000 Megaohms
- At +85°C, 10,000 Megaohm-Microfarads, need not exceed 20,000 Megaohms

DIMENSIONS (in inches)



Consult factory for other terminal configurations and/or spacing.

IGBT SNUBBER CAPACITORS METALIZED POLYPROPYLENE FILM DIELECTRIC CAPACITORS

TYPE 752P

STANDARD RATINGS

Capacitance		Case Size	Typical ESR MΩ 100kHz	Max. Ripple Current at 100kHz (Amp)		I Peak (Amp)	dv / dt (V / μs)
μF	Code			50°C	85°C		
800 VDC / 460 VRMS* (Voltage Code 800)							
0.39	394	1	9.9	16.2	13.0	300	785
0.47	474	1	8.4	17.8	14.2	370	785
0.56	564	1	8.3	19.4	15.5	380	675
0.68	684	1	9.8	21.5	17.2	385	565
0.75	754	1	9.0	22.5	18.0	425	565
0.82	824	1	8.3	23.6	18.9	460	565
1.0	105	1	6.9	26.0	20.8	565	510
1.2	125	2	6.7	26.0	20.8	595	435
1.4	145	2	5.9	26.0	20.8	695	425
1.5	155	2	5.5	26.0	20.8	745	425
1.8	185	2	6.5	26.0	20.8	720	400
2.0	205	2	6.0	26.0	20.8	800	345
2.2	225	2	5.5	26.0	20.8	880	335
2.5	255	2	4.9	26.0	20.8	1000	335
1,000 VDC / 460 VRMS* (Voltage Code 1K0)							
0.33	334	1	9.6	14.9	11.9	269	895
0.39	394	1	9.9	16.2	13.0	300	785
0.47	474	1	8.4	17.8	14.2	370	785
0.56	564	1	8.3	19.4	15.5	380	675
0.68	684	1	9.8	21.5	17.2	385	565
0.75	754	1	9.0	22.5	18.0	425	565
0.82	824	1	8.3	23.6	18.9	460	565
1.0	105	1	6.9	26.0	20.8	565	510
1.2	125	2	6.7	26.0	20.8	595	435
1.4	145	2	5.9	26.0	20.8	695	425
1.5	155	2	5.5	26.0	20.8	745	425
1,200 VDC / 460 VRMS* (Voltage Code 1K2)							
0.27	274	1-2	11.6	13.5	10.8	240	895
0.33	334	1-2	9.6	14.9	11.9	269	895
0.39	394	1-2	9.9	16.2	13.0	300	785
0.47	474	1-2	8.4	17.8	14.2	370	785
0.56	564	1-2	8.3	19.4	15.5	380	675
0.68	684	1	9.8	21.5	17.2	385	565
0.75	754	1	9.0	22.5	18.0	425	565
0.82	824	1	8.3	23.6	18.9	460	565
1.0	105	1	6.9	26.0	20.8	565	510
1.2	125	2	6.7	26.0	20.8	595	435
1.4	145	2	5.9	26.0	20.8	695	425
1.5	155	2	5.5	26.0	20.8	745	425
1,600 VDC / 920 VRMS* (Voltage Code 1K6)							
0.10	104	1	16.8	8.2	6.6	308	3080
0.12	124	1	14.1	9.0	7.2	370	2945
0.15	154	1	9.8	10.1	8.1	460	2790
0.18	184	1	9.7	11.0	8.8	555	2635
0.22	224	1	9.4	13.0	10.4	585	2340
0.27	274	1-2	7.8	14.4	11.5	600	2040
0.33	334	1-2	8.0	15.9	12.7	660	1845
0.39	394	1-2	6.9	17.4	13.9	860	1750
0.47	474	1-2	7.6	19.1	15.2	860	1565
0.56	564	1-2	6.5	21.9	17.5	1030	1475

Additional capacitance values, voltages, and tolerances are available upon request.

* AC voltage rating is at 400Hz.

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STANDARD RATINGS

Capacitance		Case Size	Typical ESR MΩ 100kHz	Max. Ripple Current at 100kHz (Amp)		I Peak (Amp)	dv / dt (V / μs)
μF	Code			50°C	85°C		
2,000 VDC / 920 VRMS* (Voltage Code 2K0)							
0.10	104	1	16.8	8.2	6.6	308	3080
0.12	124	1	14.1	9.0	7.2	370	2945
0.15	154	1	9.8	10.1	8.1	460	2790
0.18	184	1	9.7	11.0	8.8	555	2635
0.22	224	1	9.4	13.0	10.4	585	2340
0.27	274	2	7.8	14.4	11.5	600	2040
0.33	334	2	8.2	15.9	12.7	660	1845
0.39	394	2	6.9	17.4	13.9	860	1750
2,400 VDC / 920 VRMS* (Voltage Code 2K4)							
0.10	104	1	16.8	8.2	6.6	308	3080
0.12	124	1	14.1	9.0	7.2	370	2945
0.15	154	1	9.8	10.1	8.1	460	2790
0.18	184	1	9.7	11.0	8.8	555	2635
0.22	224	1	9.4	13.0	10.4	585	2340
0.27	274	2	7.8	14.4	11.5	600	2040
0.33	334	2	8.0	15.9	12.7	660	1845
3,000 VDC / 920 VRMS* (Voltage Code 3K0)							
0.10	104	1	14.1	8.2	6.6	350	3315
0.12	124	1	11.9	9.0	7.2	420	3160
0.15	154	2	11.3	11.3	9.0	440	2570
0.18	184	2	9.5	12.4	9.9	525	2475
0.22	224	2	7.9	13.7	11.0	640	2385

Additional capacitance values, voltages, and tolerances are available upon request.

* AC voltage rating is at 400Hz.

TYPICAL IMPEDANCE CURVE

