

Rectangular Types, High-Voltage Mica Capacitors

Types 271, 272, 273 — Rectangular Case, High-Current and High-Voltage Circuits



Types 271, 272, 273 are designed for frequencies ranging from 100 kHz to 3 MHz and are well suited for high-current and high-voltage radio transmitter circuit applications. Cast in rectangular cases, these capacitors are electrically equivalent to MIL-C-5 Styles CM65 through CM73 in capacitance and current ratings, but are far superior in environmental capability, temperature range, physical size, mounting configuration and reliability.

Highlights

- ◆ Type 273 permits stand-off mounting
- ◆ Highly shock resistant
- ◆ Optional aluminum mounting plates
- ◆ Convenient mounting
- ◆ Cast in rectangular cases

Specifications

Capacitance Range:	47 pF to 1.0 μ F
Voltage Range:	1 to 8 kV _{pk}
Capacitance Tolerance:	$\pm 2\%$ (G), $\pm 5\%$ (J)
Temperature Range:	-55 °C to 125 °C

Type 271 Ratings

Cap (pF)	Catalog Part Number	Maximum AC Current at 65 °C			
		3 MHz (A)	1 MHz (A)	300 kHz (A)	100 kHz (A)
250 Peak Volts					
47000	27102B473JO0	11	11	9.1	4.7
50000	27102B503JO0	11	11	9.1	4.7
51000	27102B513JO0	11	11	9.1	4.7
56000	27102B563JO0	11	11	9.1	4.7
62000	27102B623JO0	11	11	9.1	5.1
68000	27102B683JO0	11	11	9.1	5.1
75000	27102B753JO0	11	11	9.1	5.1
82000	27102B823JO0	11	11	9.1	5.1
91000	27102B913JO0	11	11	9.1	5.6
100000	27102B104JO0	11	11	9.1	5.6
500 Peak Volts					
27000	27105B273JO0	11	11	7.5	3.9
30000	27105B303JO0	11	11	8.2	3.9
33000	27105B333JO0	11	11	8.2	4.3
36000	27105B363JO0	11	11	8.2	4.3
39000	27105B393JO0	11	11	8.2	4.3
43000	27105B433JO0	11	11	9.1	4.7
1,000 Peak Volts					
10000	27110B103JO0	10	9.1	5.1	2.4
11000	27110B113JO0	11	10	5.6	2.7
12000	27110B123JO0	11	10	6.2	3.0
13000	27110B133JO0	11	11	6.8	3.0
15000	27110B153JO0	11	11	6.8	3.3
16000	27110B163JO0	11	11	6.8	3.3
18000	27110B183JO0	11	11	7.5	3.3
20000	27110B203JO0	11	11	7.5	3.6
22000	27110B223JO0	11	11	7.5	3.6
24000	27110B243JO0	11	11	7.5	3.6
1,500 Peak Volts					
8000	27115B802JO0	10	8.2	4.7	2.2
8200	27115B822JO0	10	8.2	4.7	2.2
9100	27115B912JO0	10	8.2	4.7	2.4
2700	27120B272JO0	6.8	5.1	2.7	1.3
2,000 Peak Volts					
3000	27120B302JO0	7.5	5.1	3.0	1.3
3300	27120B332JO0	7.5	5.6	3.0	1.5
3600	27120B362JO0	7.5	5.6	3.3	1.5
3900	27120B392JO0	8.2	6.2	3.3	1.6

Cap (pF)	Catalog Part Number	Maximum AC Current at 65 °C			
		3 MHz (A)	1 MHz (A)	300 kHz (A)	100 kHz (A)
4000	27120B402JO0	8.2	6.2	3.3	1.6
4300	27120B432JO0	8.2	6.2	3.6	1.6
4700	27120B472JO0	8.2	6.8	3.6	1.8
5000	27120B502JO0	8.2	6.8	3.6	1.8
5100	27120B512JO0	8.2	6.8	3.6	1.8
5600	27120B562JO0	9.1	7.5	3.9	2.0
6000	27120B602JO0	9.1	7.5	4.3	2.0
6200	27120B622JO0	9.1	7.5	4.3	2.0
6800	27120B682JO0	10.0	7.5	4.3	2.0
7500	27120B752JO0	10.0	8.2	4.7	2.2
3,000 Peak Volts					
47	27130B470JO0	1.2	0.51	0.15	0.051
51	27130B510JO0	1.3	0.51	0.18	0.056
56	27130B560JO0	1.3	0.56	0.2	0.1
62	27130B620JO0	1.5	0.62	0.22	0.1
68	27130B680JO0	1.5	0.62	0.24	0.075
75	27130B750JO0	1.5	0.62	0.27	0.082
82	27130B820JO0	1.6	0.68	0.27	0.082
91	27130B910JO0	1.6	0.68	0.33	0.091
100	27130B101JO0	1.8	0.75	0.33	0.1
110	27130B111JO0	1.8	0.82	0.36	0.12
120	27130B121JO0	2	0.91	0.39	0.15
130	27130B131JO0	2	0.91	0.43	0.16
150	27130B151JO0	2.2	1	0.47	0.2
160	27130B161JO0	2.2	1.1	0.51	0.2
180	27130B181JO0	2.4	1.1	0.56	0.22
200	27130B201JO0	2.4	1.2	0.62	0.24
220	27130B221JO0	2.7	1.3	0.62	0.27
240	27130B241JO0	2.7	1.3	0.68	0.3
250	27130B251JO0	2.7	1.3	0.68	0.3
270	27130B271JO0	3.1	1.5	0.75	0.3
300	27130B301JO0	3	1.5	0.75	0.36
330	27130B331JO0	3	1.6	0.82	0.36
360	27130B361JO0	3.3	1.6	0.91	0.4
390	27130B391JO0	3.3	1.8	0.91	0.4
430	27130B431JO0	3.6	1.8	1	0.47
470	27130B471JO0	3.6	2	1.1	0.47
500	27130B501JO0	3.6	2	1.1	0.51
510	27130B511JO0	3.6	2	1.1	0.51

Rectangular Types, High-Voltage Mica Capacitors

Types 271, 272 and 273 Ratings

Cap (pF)	Catalog Part Number	Maximum AC Current at 65 °C			
		3 MHz (A)	1 MHz (A)	300 kHz (A)	100 kHz (A)
560	27130B561J00	3.9	2.2	1.2	0.51
620	27130B621J00	3.9	2.4	1.2	0.56
680	27130B681J00	4.3	2.4	1.3	0.62
750	27130B751J00	4.3	2.7	1.3	0.62
820	27130B821J00	4.3	2.7	1.5	0.68
910	27130B911J00	4.7	3.0	1.5	0.68
1000	27130B102J00	4.7	3.0	1.6	0.75
1100	27130B112J00	5.1	3.3	1.6	0.82
1200	27130B122J00	5.1	3.3	1.8	0.82
1300	27130B132J00	5.6	3.6	1.8	0.91
1500	27130B152J00	5.6	3.9	2.0	0.91
1600	27130B162J00	5.6	3.9	2.0	1.0
1800	27130B182J00	6.2	4.3	2.2	1.1
2000	27130B202J00	6.2	4.3	2.4	1.1
2200	27130B222J00	6.8	4.7	2.4	1.2
250 Peak Volts					
250000	27202B254J00	15	18	15	8.2
500 Peak Volts					
82000	27205B823J00	15	18	15	8.2
91000	27205B913J00	15	18	15	8.2
100000	27205B104J00	15	18	15	8.2
200000	27205B204J00	15	18	15	8.2
1,000 Peak Volts					
24000	27215B243J00	13	15	12	6.8
27000	27215B273J00	13	15	12	6.8
30000	27215B303J00	13	15	12	6.8
33000	27215B333J00	13	15	13	7.5
36000	27215B363J00	13	16	13	7.5
39000	27215B393J00	15	16	13	7.5
43000	27215B433J00	15	16	13	7.5
47000	27215B473J00	15	16	13	7.5
50000	27215B503J00	15	16	15	7.5
51000	27215B513J00	15	16	15	7.5
1,500 Peak Volts					
8200	27220B822J00	10	10	7.5	3.9
9100	27220B912J00	11	10	8.2	4.3
10000	27220B103J00	11	11	8.2	4.3
11000	27220B113J00	11	11	8.2	4.7
12000	27220B123J00	11	11	9.1	4.7
13000	27220B133J00	12	12	9.1	5.1
15000	27220B153J00	12	12	10	5.1
16000	27220B163J00	12	12	10	5.6
18000	27220B183J00	12	13	10	5.6
20000	27220B203J00	13	13	11	6.2
22000	27220B223J00	13	13	11	6.2
2,000 Peak Volts					
8200	27220B822J00	10	10	7.5	3.9
9100	27220B912J00	11	10	8.2	4.3
10000	27220B103J00	11	11	8.2	4.3
11000	27220B113J00	11	11	8.2	4.7
12000	27220B123J00	11	11	9.1	4.7
13000	27220B133J00	12	12	9.1	5.1
15000	27220B153J00	12	12	10	5.1
16000	27220B163J00	12	12	10	5.6
18000	27220B183J00	12	13	10	5.6
20000	27220B203J00	13	13	11	6.2
22000	27220B223J00	13	13	11	6.2
3,000 Peak Volts					
2700	27230B272J00	8.2	6.8	4.3	2.2
3000	27230B302J00	8.2	6.8	4.7	2.2
3300	27230B332J00	8.2	6.8	4.7	2.4
3600	27230B362J00	8.2	7.5	5.1	2.4
3900	27230B392J00	9.1	7.5	5.6	2.7
4300	27230B432J00	9.1	7.5	5.6	2.7
4700	27230B472J00	9.1	8.2	6.2	3.0
5000	27230B502J00	9.1	8.2	6.2	3.0
5100	27230B512J00	9.1	8.2	6.2	3.0
5600	27230B562J00	9.1	9.1	6.2	3.3
6000	27230B602J00	10	9.1	6.8	3.6
6200	27230B622J00	10	9.1	6.8	3.6
6800	27230B682J00	10	9.1	6.8	3.6
7500	27230B752J00	10	9.1	6.8	3.9
5,000 Peak Volts					
47	27250B470J00	1.5	0.62	0.20	0.062
51	27250B510J00	1.6	0.7	0.2	0.062

Cap (pF)	Catalog Part Number	Maximum AC Current at 65 °C			
		3 MHz (A)	1 MHz (A)	300 kHz (A)	100 kHz (A)
56	27250B560J00	1.8	0.8	0.3	0.068
62	27250B620J00	1.8	0.8	0.3	0.075
68	27250B680J00	2	0.9	0.3	0.075
75	27250B750J00	2	1.0	0.4	0.082
82	27250B820J00	2.2	1.1	0.4	0.091
91	27250B910J00	2.4	1.2	0.4	0.1
100	27250B101J00	2.4	1.2	0.5	0.1
110	27250B111J00	2.7	1.3	0.5	0.15
120	27250B121J00	2.7	1.5	0.6	0.18
130	27250B131J00	3	1.6	0.6	0.22
150	27250B151J00	3.3	1.8	0.7	0.24
160	27250B161J00	3.3	1.8	0.8	0.27
180	27250B181J00	3.3	2.0	0.8	0.3
200	27250B201J00	3.6	2.0	0.8	0.33
220	27250B221J00	3.6	2.2	0.9	0.39
240	27250B241J00	3.6	2.4	1.0	0.43
250	27250B251J00	3.6	2.4	1.0	0.43
270	27250B271J00	3.9	2.4	1.1	0.47
300	27250B301J00	3.9	2.7	1.1	0.51
330	27250B331J00	4.3	2.7	1.2	0.51
360	27250B361J00	4.3	2.7	1.3	0.56
390	27250B391J00	4.3	2.7	1.3	0.62
430	27250B431J00	4.7	3.0	1.5	0.68
470	27250B471J00	4.7	3.3	1.5	0.68
500	27250B501J00	4.7	3.3	1.6	0.75
510	27250B511J00	4.7	3.3	1.6	0.75
560	27250B561J00	5.1	3.6	1.8	0.82
600	27250B601J00	5.1	3.6	1.8	0.82
620	27250B621J00	5.1	3.6	1.8	0.82
680	27250B681J00	2.1	3.6	1.8	0.82
750	27250B751J00	5.6	3.9	2.2	0.91
820	27250B821J00	5.6	3.9	2.4	1
910	27250B911J00	5.6	4.3	2.4	1.1
1000	27250B102J00	6.2	4.3	2.4	1.2
1100	27250B112J00	6.2	4.7	2.7	1.2
1200	27250B122J00	6.2	4.7	2.7	1.3
1300	27250B132J00	6.8	5.1	3.0	1.3
1500	27250B152J00	6.8	5.1	3.3	1.5
1600	27250B162J00	6.8	5.6	3.6	1.5
1800	27250B182J00	7.5	5.6	3.6	1.6
2000	27250B202J00	7.5	6.2	3.6	1.8
2200	27250B222J00	7.5	6.2	3.9	2
2400	27250B242J00	8.2	6.2	4.3	2
400 Peak Volts					
1000000	27304B204L00	18	25	22	12
600 Peak Volts					
200000	27306B204J00	18	25	22	12
250000	27306B254J00	18	25	22	12
300000	27306B304J00	18	25	22	12
400000	27306B404J00	18	25	22	12
500000	27306B504J00	18	25	22	12
600000	27306B604J00	18	25	22	12
750000	27306B754J00	18	25	22	12
2,000 Peak Volts					
100000	27320B104J00	18	23	18	10.5
4,000 Peak Volts					
25000	27340B253J00	18	24	19	11.5
30000	27340B303J00	18	24	19	11.5
40000	27340B403J00	18	24	20	12.0
50000	27340B503J00	18	25	21	12.0
5,000 Peak Volts					
20000	27350B203J00	18	23	18	10.5
8,000 Peak Volts					
200	27380B201J00	7.5	5.0	1.5	0.5
250	27380B251J00	7.5	5.0	1.5	0.5
500	27380B501J00	8.5	6.0	3.0	1.0
1000	27380B102J00	10.0	8.5	4.5	1.5
2000	27380B202J00	11.5	11.5	7.5	3.0
3000	27380B302J00	12.5	13.5	9.5	4.0
4000	27380B402J00	13.5	15.5	10.5	5.0
4500	27380B452J00	14.0	16.0	11.5	6.0
5000	27380B502J00	14.0	16.0	11.5	6.0
6000	27380B602J00	15.0	17.0	12.5	6.5
8000	27380B802J00	16.0	19.0	14.0	7.5
10000	27380B103J00	17.0	20.0	15.0	8.5