

# Type Z Lighting Capacitors, 90 °C Rated, Oil Filled

## AC Rated, Oil Filled/Impregnated, Metallized Polypropylene Capacitors



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For better performance in HID Lighting and HV Ballasts, Type Z oval and round oil filled metallized polypropylene lighting capacitors are built for operating in the high temperature environments for high intensity discharge (HID) lighting and other high voltage ballast applications. Each HID catalog capacitor includes an external resistor that discharges the capacitor to less than 50V in one minute, and the oil filled process assures better reliability than dry capacitors.

### Highlights

- Meets EIA Standard EIA-456-A
- Dual rated HID
- Dual or triple value caps for sign ballast
- UL-810 Fault current protection

### Specifications

Capacitance Range	5.0 $\mu$ F to 65 $\mu$ F
Capacitance Tolerance	$\pm$ 3%
Rated Voltage	240 Vac to 525 Vac
Operating Temperature Range with Ripple	-40 °C to +90 °C
Approval Certification	UL cUL
<b>RoHS Compliant</b>	

### Part Numbering System

Z	73	S	40	26	M	N
Type	Can Size	Impregnant	Voltage Ratings	Capacitance Code	Voltage/ Capacity Descriptor	CDE Factory
Z	73 = 1.75" Rd 74 = 2" Rd 76 = 2.50" Rd 91 = 1.25" Oval 92 = 1.50" Oval 93 = 1.75" Oval 94 = 2.00" Oval 81 = 30 mm Rd 83 = 40 mm Rd 84 = 45 mm Rd 85 = 50 mm Rd	S = Epoxidized Soy Bean Oil W = Dry w/ wire A = Dry w/ QC	33 = 330 VAC 40 = 400 VAC	26 = 26 $\mu$ F 40 = 40 $\mu$ F	90°C Full Life 100°C Full Life 100°C Reduced Life	

### Ratings

CAP ( $\mu$ F)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>240 VAC, 90°C Case Temperature</b>			
35	Z92S2435MN	B	3.75 (95.3)
40	Z92S2440MN	B	3.75 (95.3)
45	Z92S2445MN	B	3.75 (95.3)
52	Z92S2452MN	B	3.75 (95.3)
55	Z92S2455MN	B	3.75 (95.3)
<b>300 VAC, 90°C Case Temperature</b>			
5	Z91S3005MN	A	2.19 (55.6)
6	Z91S3006MN	A	2.19 (55.6)
12	Z91S3012MN	A	2.88 (73.2)
14	Z92S3014MN	B	2.75 (69.9)
28	Z93S3028MN	C	3.13 (79.5)

CAP ( $\mu$ F)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>300 VAC, 90°C Case Temperature</b>			
40	Z93S3040MN	C	3.25 (82.6)
55	Z93S3055MN	C	3.88 (98.6)
64	Z93S3064MN	C	4.25 (108)
<b>330 VAC, 90°C Case Temperature</b>			
7	Z91S3307MN	A	2.19 (55.6)
8	Z91S3308MN	A	2.19 (55.6)
10	Z91S3310MN	A	2.69 (68.3)
12	Z91S3312MN	A	2.88 (73.2)
14	Z91S3314MN	A	2.88 (73.2)
16	Z91S3316MN	A	3.75 (95.3)
17.5	Z92S3317NN	B	3.13 (79.5)

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### Oil-Filled, Oval Metal Case

Rated for 60,000 hours

CAP (μF)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>330 VAC, 90°C Case Temperature</b>			
24	Z93S3324MN	C	2.75 (69.9)
26	Z93S3326MN	C	3.13 (79.5)
29	Z93S3329MN	C	3.13 (79.5)
30	Z93S3330MN	C	3.13 (79.5)
34	Z93S3334MN	C	3.13 (79.5)
35	Z93S3335MN	C	3.13 (79.5)
48	Z93S3348MN	C	3.88 (98.6)
<b>400 VAC, 90°C Case Temperature</b>			
10	Z92S4010MN	B	2.75 (69.9)
15	Z93S4015MN	C	2.75 (69.9)
21	Z93S4021MN	C	3.13 (79.5)
22.5	Z93S4022NN	C	3.13 (79.5)
24	Z93S4024MN	C	3.13 (79.5)
<b>480 VAC, 90°C Case Temperature</b>			
3	Z91S4803MN	A	2.25 (57.2)
4	Z91S4804MN	A	2.69 (68.3)
5	Z91S4805MN	A	2.88 (73.2)
6	Z92S4806MN	B	2.75 (69.9)
10	Z92S4810MN	B	2.75 (69.9)
12	Z93S4812MN	C	3.13 (79.5)
15	Z92S4815MN	B	3.75 (95.3)
20	Z93S4820MN	C	3.75 (95.3)
21	Z93S4821MN	C	3.75 (95.3)
22	Z93S4822MN	C	3.88 (98.6)
24	Z93S4824PN	C	3.88 (98.6)
26	Z93S4826MN	C	3.88 (98.6)
28	Z93S4828PN	C	3.88 (98.6)
<b>525 VAC, 90°C Case Temperature</b>			
16	Z93S5216NN	C	3.13 (79.5)
24	Z93S5224NN	C	4.25 (108.0)
26	Z93S5226NN	C	4.25 (108.0)
26	Z94S5226NN	D	2.88 (73.2)
32	Z93S5232NN	C	4.75 (120.7)
32	Z94S5232NN	D	3.75 (95.3)

CAP (μF)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)	VAC
<b>400-525 VAC, 100°C Case Temperature</b>				
24	Z94S4024BN	D	3.25 (82.6)	400
24	Z94S4824BN	D	3.75 (95.3)	480
21	Z94S5221JN	D	3.75 (95.3)	525
26	Z94S5226JN	D	3.75 (95.3)	525

### Oil-Filled, Round Metal Case

Rated for 60,000 hours

CAP (μF)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>300 VAC, 90°C Case Temperature</b>			
8	Z73S3008MN	P	2.17 (55.1)
14	Z73S3014MN	P	2.38 (60.5)
22.5	Z73S3022NN	P	2.88 (73.2)
<b>330 VAC, 90°C Case Temperature</b>			
5	Z73S3305MN	P	2.25 (57.2)
7	Z73S3307MN	P	2.88 (73.2)
12	Z73S3312MN	P	2.38 (60.5)
14	Z73S3314MN	P	2.88 (73.2)
28	Z73S3328MN	P	3.15 (80.0)
<b>400 VAC, 90°C Case Temperature VAC</b>			
10	Z73S4010MN	P	2.38 (60.5)
15	Z73S4015MN	P	2.88 (73.2)
22.5	Z73S4022NN	P	3.75 (95.3)
24	Z73S4024MN	P	3.75 (95.3)
<b>480 VAC, 90°C Case Temperature</b>			
10	Z73S4810MN	P	2.88 (73.2)
24	Z74S4824MN	S	3.25 (82.6)
24	Z76S4824MN	T	3.15 (80.0)
<b>525 VAC, 90°C Case Temperature</b>			
26	Z74S5226NN	S	4.75 (120.7)
32	Z74S5232NN	S	4.92 (125.0)
32	Z76S5232NN	T	3.55 (90.2)

CAP (μF)	CD-AERO P/N	BASE SIZE	CAN HEIGHT Inches (mm)	VAC
<b>400-480 VAC, 100°C Case Temperature</b>				
10	Z73S4010BN	P	2.38 (60.5)	400
15	Z73S4015BN	P	3.25 (82.6)	400
24	Z74S4024BN	S	3.75 (95.3)	400
24	Z74S4824BN	S	4.25 (108.0)	480

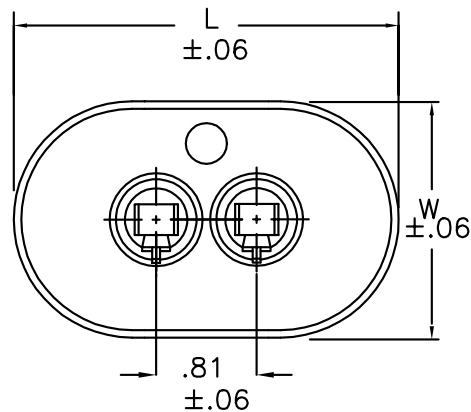
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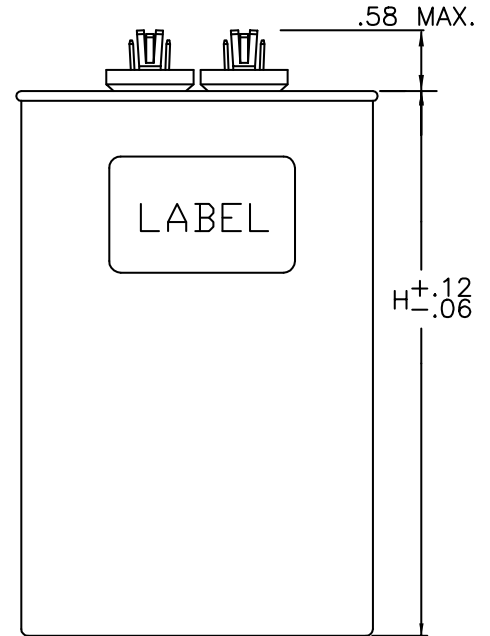
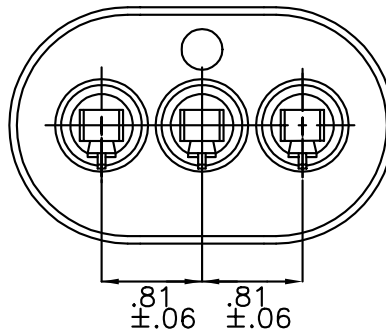
### Oval Oil-Filled Case Sizes

Base Size	Description	L Inches	W Inches
A	1¼" Oval	2.16	1.31
B	1½" Oval	2.69	1.56
C	1¾" Oval	2.91	1.91
D	2" Oval	3.66	1.97

### Oval Single Cover Configuration



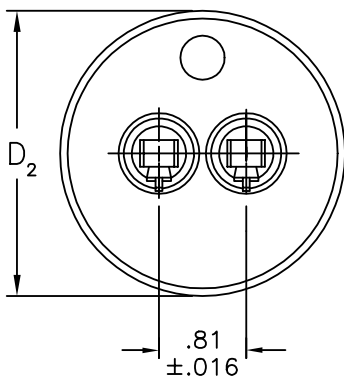
### Oval Dual Cover Configuration



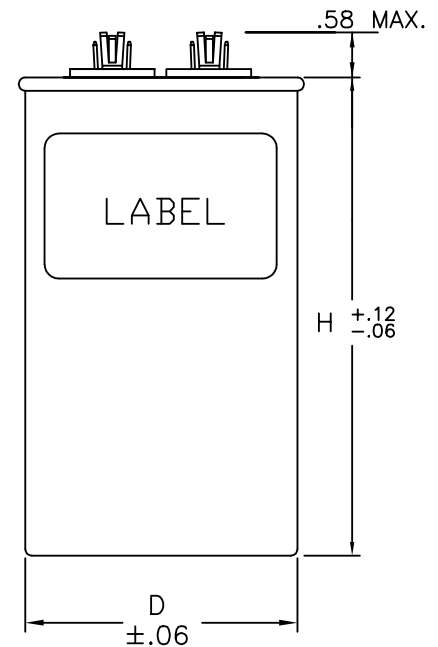
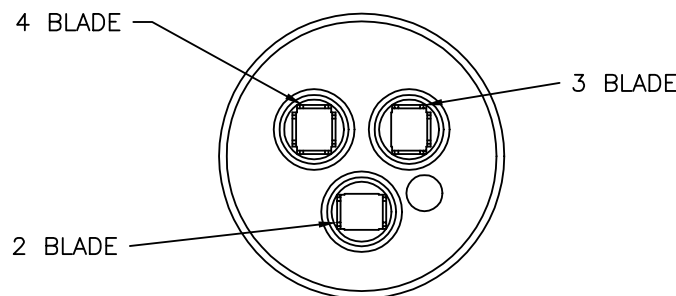
### Round Oil-Filled Case Sizes

Base Size	Description	D Inches	D <sub>2</sub> Inches
P	1¾" Round	1.75	1.87
S	2" Round	2.00	2.12
T	2½" Round	2.50	2.62

### Round Single Cover Configuration



### Round Dual Cover Configuration



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