

EAW - Extreme Application Welding Electrolytic Capacitors



- High Energy Density Product
- Screw Terminals
- Suitable for use in welding applications.
- Custom designs available upon request.

General Specifications:

Operating Temperature:
-40°C to +85°C with voltage

Voltage Range:
35 VDC to 200 VDC

Capacitance Range:
2400 μ F to 120,000 μ F

Capacitance Tolerance:
-10% +20%; -10% +50%;
-10% +75%

DC Leakage Current:

$I = .006 \sqrt{CV}$ after 5 minutes

Not to exceed 6mA

C = Capacitance in μ F

V = Rated Voltage

I = Leakage Current in mA

QA Stability Test:

Apply WVDC for 1000 hours at 85°C

- Capacitance change \leq 10% from initial limits
- DC leakage current meets initial limits
- ESR \leq 175% of initial measured value

Types EAP, EAW, EAN, EAF, EASB, EAL Part Number Information

DuraCap Catalog Number **CGS** **184** **U** **010** **X3L** **(3)** **P** **H)** **[-S]**

TYPE: _____
Identifies the basic type
EAP, EAW, EAN, EAF, EASB, EAL

CAPACITANCE: _____
Expressed in microfarads
The first two digits are significant figures
The third digit is the number of zeros

CAPACITANCE TOLERANCE: _____
F = -0 / +30% **R** = -15 / +15% **U** = -10 / +75%
G = -0 / +50% **S** = -10 / +30% **X** = -10 / +20%
M = -20 / +20% **T** = -10 / +50% **Z** = -10 / +10%

DC VOLTAGE RATING: _____
Zeros are used to precede the voltage rating where necessary to complete the three digit block
The letter 'R' indicates a decimal point

CASE CODE: _____
See chart on next page

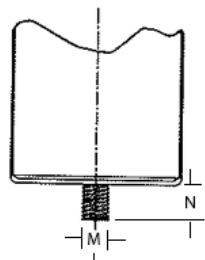
INSULATING SLEEVE: _____
 0 = No sleeve
 1 = Mylar (Polyester)
 3 = Single Layer PVC - .008" thickness
 7 = Double Layer .008" PVC (.016" total thickness)
 8 = Blue PVC - .012" thickness

POLARITY: _____
P = Polar **S** = Semi-Polar **N** = Non-Polar

TERMINAL: _____

- H = High Post
- L = Low Post
- V = Printed Circuit Mount
- D = Low Post, Low Resistance Screw Mount (1/4 - 28 Thread)
- F = High Post Metric Thread
- G = Low Post Metric Thread
- N = High Post, Low Resistance Screw Mount (1/4 - 28 Thread)
- S = Stud Mount (see chart below)

CAN DIAMETER	M THREAD	N INCH	N MM
1.375	M8	.472	12
1.750	M8	.472	12
2.000	M12	.630	16
2.500	M12	.630	16
3.000	M12	.630	16
3.500	M12	.630	16

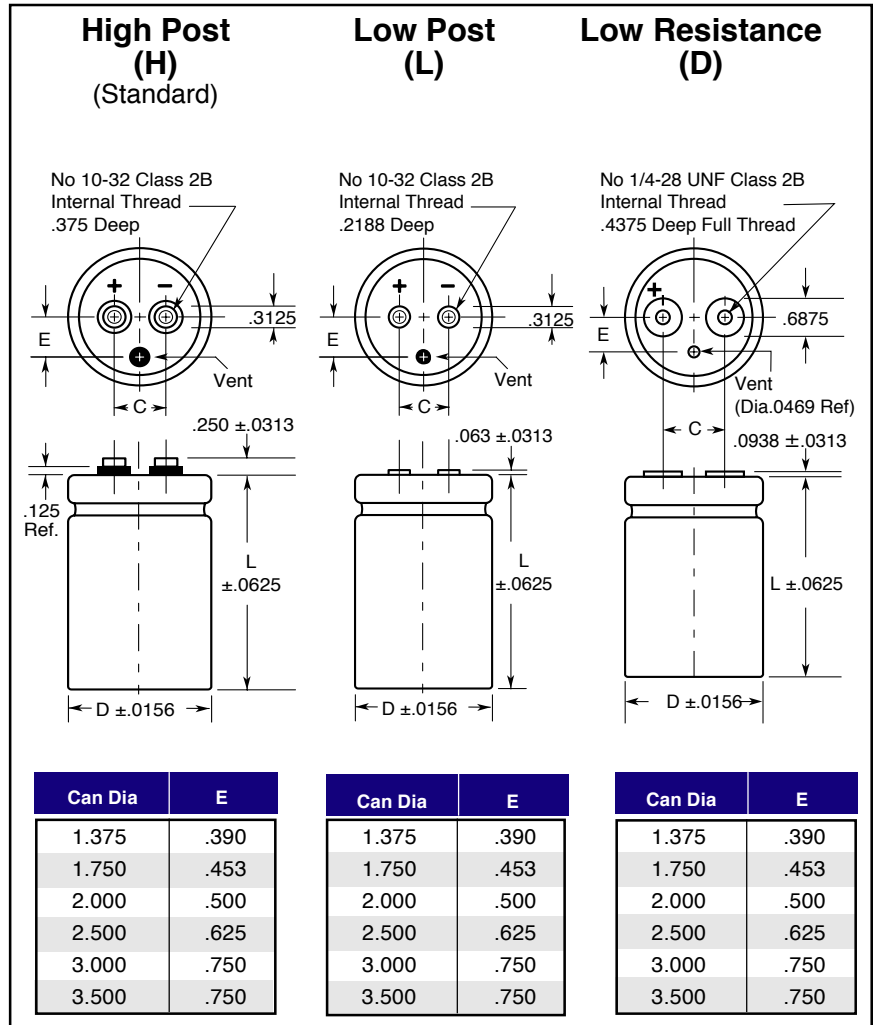


STUDED CAN
CROSS SECTION DETAIL

Type EAW Dimensions and Size Charts

Case Code Chart

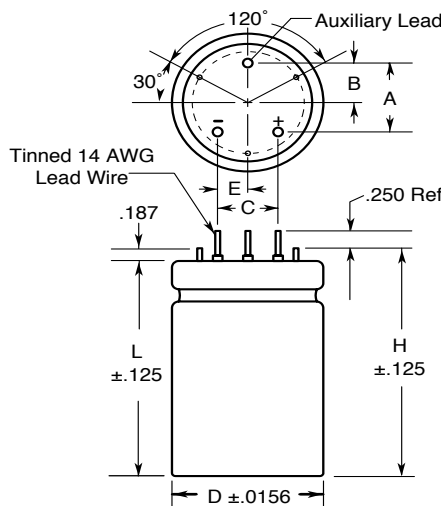
Case Code	Uninsulated Can						Mounting Bracket
	Inches		mm		Inches	mm	
	D	L	D	L	C	C	
R2C	1.375	2.125	35	54	.500	12.7	VR3
R2L	1.375	2.625	35	67	.500	12.7	VR3
R3C	1.375	3.125	35	79.4	.500	12.7	VR3
R3L	1.375	3.625	35	92	.500	12.7	VR3
R4C	1.375	4.125	35	105	.500	12.7	VR3
R4L	1.375	4.625	35	117.5	.500	12.7	VR3
R5C	1.375	5.125	35	130	.500	12.7	VR3
R5L	1.375	5.625	35	143	.500	12.7	VR3
U2C	1.750	2.125	44.5	54	.750	19	VR6
U2L	1.750	2.625	44.5	67	.750	19	VR6
U3C	1.750	3.125	44.5	79.4	.750	19	VR6
U3L	1.750	3.625	44.5	92	.750	19	VR6
U4C	1.750	4.125	44.5	105	.750	19	VR6
U4L	1.750	4.625	44.5	117.5	.750	19	VR6
U5C	1.750	5.125	44.5	130	.750	19	VR6
U5L	1.750	5.625	44.5	143	.750	19	VR6
V2C	2.000	2.125	50.8	54	.875	22.2	VR8
V2L	2.000	2.625	50.8	67	.875	22.2	VR8
V3C	2.000	3.125	50.8	79.4	.875	22.2	VR8
V3L	2.000	3.625	50.8	92	.875	22.2	VR8
V4C	2.000	4.125	50.8	105	.875	22.2	VR8
V4L	2.000	4.625	50.8	117.5	.875	22.2	VR8
V5C	2.000	5.125	50.8	130	.875	22.2	VR8
V5L	2.000	5.625	50.8	143	.875	22.2	VR8
W3C	2.500	3.125	63.5	79.4	1.125	28.6	VR10
W3L	2.500	3.625	63.5	92	1.125	28.6	VR10
W4C	2.500	4.125	63.5	105	1.125	28.6	VR10
W4L	2.500	4.625	63.5	117.5	1.125	28.6	VR10
W5C	2.500	5.125	63.5	130	1.125	28.6	VR10
W5L	2.500	5.625	63.5	143	1.125	28.6	VR10
X3L	3.000	3.625	76.2	92	1.250	31.7	VR12
X4C	3.000	4.125	76.2	105	1.250	31.7	VR12
X4L	3.000	4.625	76.2	117.5	1.250	31.7	VR12
X5C	3.000	5.125	76.2	130	1.250	31.7	VR12
X5L	3.000	5.625	76.2	143	1.250	31.7	VR12
X5R	3.000	5.875	76.2	149	1.250	31.7	VR12
X6L	3.000	6.625	76.2	168	1.250	31.7	VR12
X7L	3.000	7.625	76.2	194	1.250	31.7	VR12
X8L	3.000	8.625	76.2	219	1.250	31.7	VR12
Y3L	3.500	3.625	88.9	92	1.25	31.7	N/A
Y4C	3.500	4.125	88.9	105	1.25	31.7	N/A
Y4L	3.500	4.625	88.9	117.5	1.25	31.7	N/A
Y5C	3.500	5.125	88.9	130	1.25	31.7	N/A
Y5L	3.500	5.625	88.9	143	1.25	31.7	N/A
Y5R	3.500	5.875	88.9	149	1.25	31.7	N/A
Y6L	3.500	6.625	88.9	168	1.25	31.7	N/A
Y7L	3.500	7.625	88.9	194	1.25	31.7	N/A
Y8L	3.500	8.625	88.9	219	1.25	31.7	N/A



Add .015 inches to diameter and .045 inches to length for PVC insulating sleeve.

PC Mounting Board Dimensions

Case Code	Uninsulated Can						
	Inches						
	D	L	H	A	B	C	E
R1N	1.375	1.750	1.937	.550	.375	.500	.250
R2C	1.375	2.125	2.312	.550	.375	.500	.250
R2L	1.375	2.625	2.812	.550	.375	.500	.250
R3C	1.375	3.125	3.312	.550	.375	.500	.250
R3L	1.375	3.625	3.812	.550	.375	.500	.250
R4C	1.375	4.125	4.312	.550	.375	.500	.250
R4L	1.375	4.625	4.812	.550	.375	.500	.250
R5C	1.375	5.125	5.312	.550	.375	.500	.250
R5L	1.375	5.625	5.812	.550	.375	.500	.250
V2C	2.000	2.125	2.312	1.000	.575	.800	.400
V2L	2.000	2.625	2.812	1.000	.575	.800	.400
V3C	2.000	3.125	3.312	1.000	.575	.800	.400
V3L	2.000	3.625	3.812	1.000	.575	.800	.400
V4C	2.000	4.125	4.312	1.000	.575	.800	.400
V4L	2.000	4.625	4.812	1.000	.575	.800	.400
V5C	2.000	5.125	5.312	1.000	.575	.800	.400
V5L	2.000	5.625	5.812	1.000	.575	.800	.400



Capacitance (μF)	Max ESR (Ohms) @ 120Hz	Max Ripple Amps RMS @ 120Hz, 85°C	Diameter	Length	Part Description
60 WVDC; 75 VDC Surge					
20000	.010	18.1	2.500	4.625	EAW203X060W4L3PH
30000	.013	24.0	2.500	4.625	EAW303X060W4L3PN
115000	.008	29.2	3.000	8.625	EAW1153X060X8L3PN
75 WVDC; 95 VDC Surge					
27000	.035	10.0	3.000	4.125	EAW273U075X4C3PH
80000	.011	24.9	3.000	8.625	EAW803X075X8L3PN
100 WVDC; 125 VDC Surge					
10000	.090	5.8	2.500	4.125	EAW103X100W4C3PN
200 WVDC; 250 VDC Surge					
10000	.090	5.8	2.500	4.125	EAW103X200W4C3PN
30000	.030	16.3	3.500	8.000	EAW303X200Y8L3PM