

+65°C

AC Motor Start Capacitors

Features-

- Plastic Case, Moisture and Oil Resistant
- Voltages from 110 VAC- 330 VAC
- SEA-1 Meets EIA Type 1 Specifications
- SEA-2 Meets EIA Type 2 Specifications
- UL Recognized Capacitors

General Specifications-

Operating Temperature:

-40 to +65°C

Voltage Range:

110 - 330 VAC

Capacitance Range:

21 - 1280µF

Capacitance Tolerance:

-0% ~ +20%

Operating Frequency:

50 - 60Hz

Case Size:

8 Standard Sizes from
1.437" x 2.750" - 2.562" x 4.365"

Termination:

¼" Quick Disconnect Terminals (Std.)

Meets Requirements of EIA-463-A:

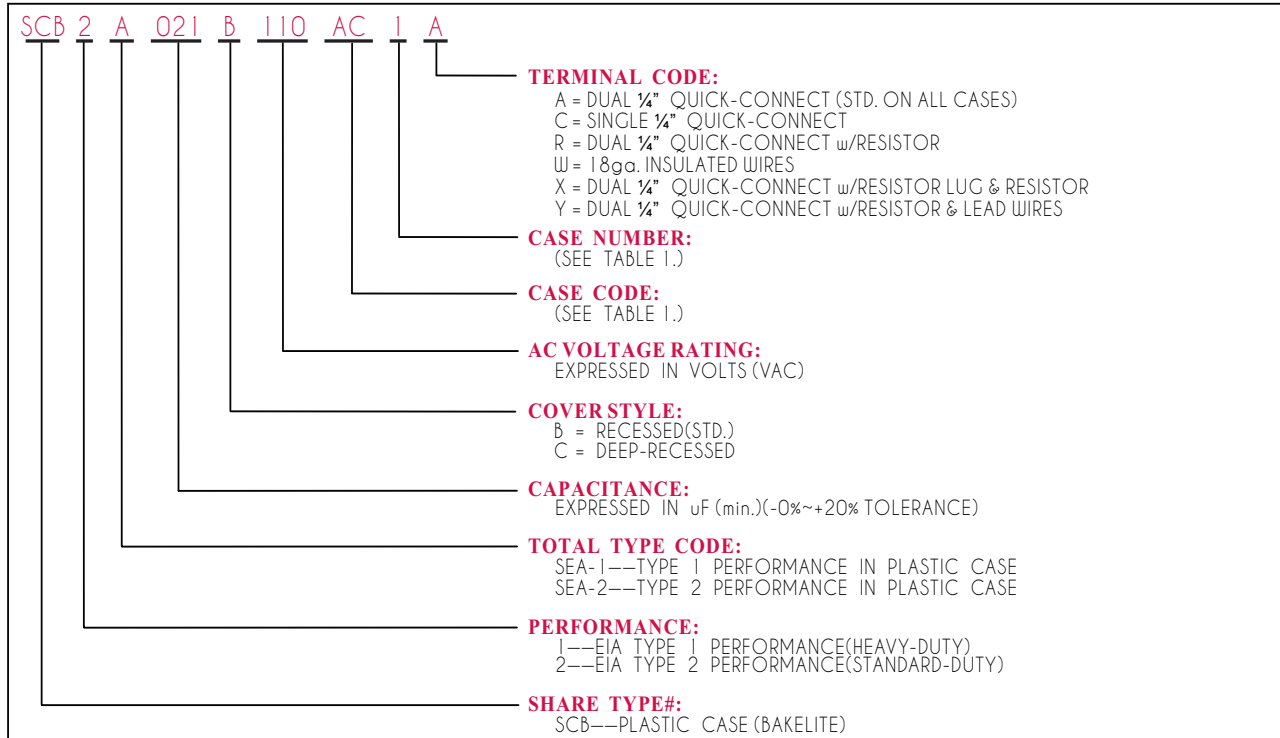
SEA-1 Meets Type 1, Heavy Duty,
Specifications
SEA-2 Meets Type 2, Standard Duty,
Specifications.



Product Description:

SHARE's type SEA-1 and SEA-2 AC Motor Start units are non-polarized aluminum electrolytic capacitors designed for intermittent AC duty. These capacitors are used in starting fractional horsepower, single-phase electric motors, as well as in gear motor applications. The capacitors are housed in rugged plastic cases, which require no added insulation. Mounting hardware, end caps and brackets are available to facilitate mounting. Units can be supplied with bleeder resistors and lead wires if required.

PART NUMBER BREAK-DOWN:



AC Motor Starting Capacitor Dimensions

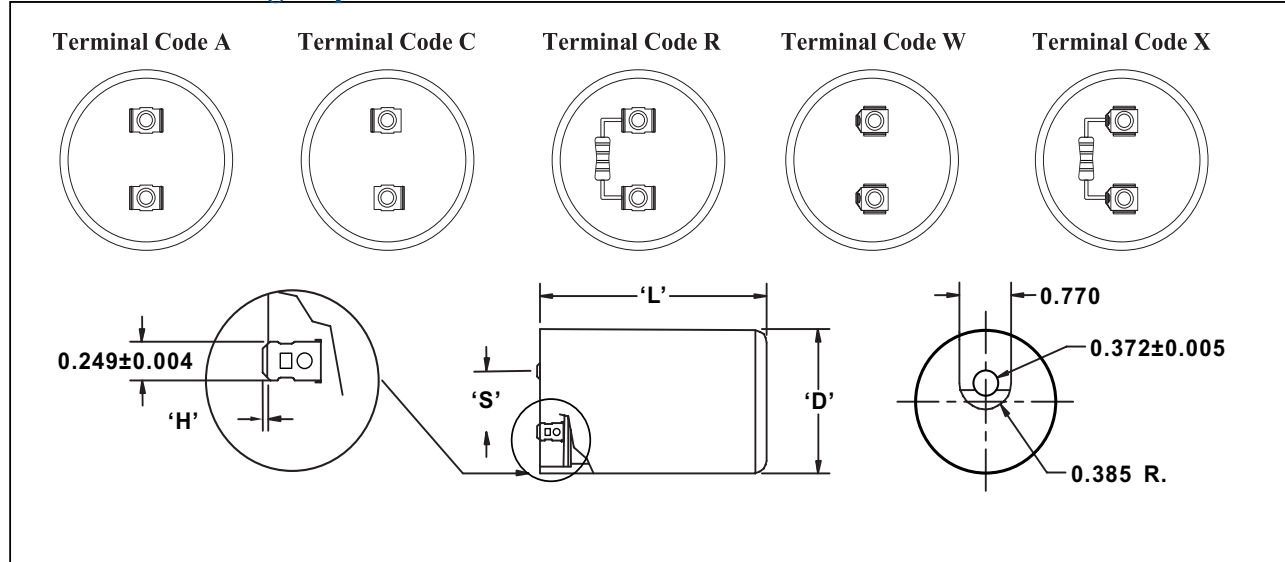


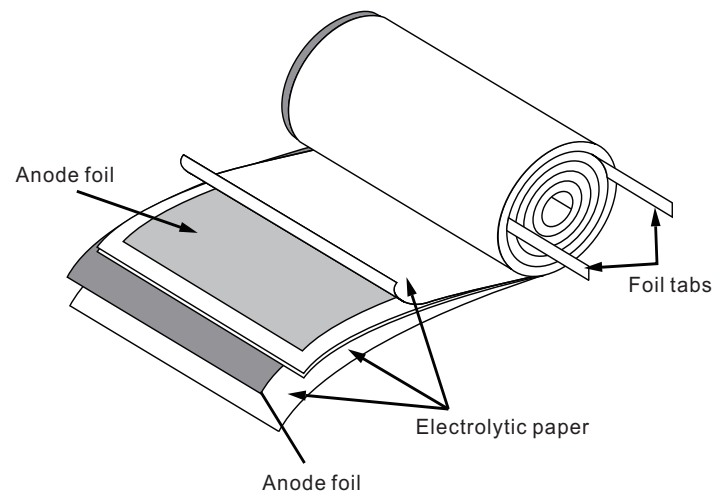
Table 1. Case Dimensions (in.)

CASE CODE	CASE NUMBER	'D' \pm 0.020	'L' \pm 0.020	'S'	'H'
AC	1	1.437	2.750	0.500 nom	0.025 max
AD	2	1.437	3.365	0.500 nom	0.025 max
AE	3	1.437	4.365	0.500 nom	0.025 max
BD	4	1.812	3.365	0.625 nom	0.025 max
BE	5	1.812	4.365	0.625 nom	0.025 max
CD	6	2.062	3.365	0.875 nom	0.025 max
CE	7	2.062	4.365	0.875 nom	0.025 max
DE	8	2.562	4.365	0.875 nom	0.025 max

CONTRUSCTION DATA

The manufacturing process begins with the anode foil being electrochemically etched to increase the surface area and then "formed" to produce the aluminum oxide layer. Both the anode and cathode foils are then interleaved with absorbent paper and wound into a cylinder. During the winding process, aluminum tabs are attached to each foil to provide the electrical contact.

The deck, complete with terminals, is attached to the tabs and then folded down to rest on top of the winding. The complete winding is impregnated with electrolyte before being housed in a suitable container, usually an aluminum can, and sealed. Throughout the process, all materials inside the housing must be maintained at the highest purity and be compatible with the electrolyte.



Each capacitor is aged and tested before being sleeved and packed. The purpose of aging is to repair any damage in the oxide layer and thus reduce the leakage current to a very low level. Aging is normally carried out at the rated temperature of the capacitor and is accomplished by applying voltage to the device while carefully controlling the supply current. The process may take several hours to complete.

Damage to the oxide layer can occur due to variety of reasons:

- Slitting of the anode foil after forming
- Attaching the tabs to the anode foil
- Minor mechanical damage caused during winding

A sample from each batch is taken by the quality department after completion of the production process.

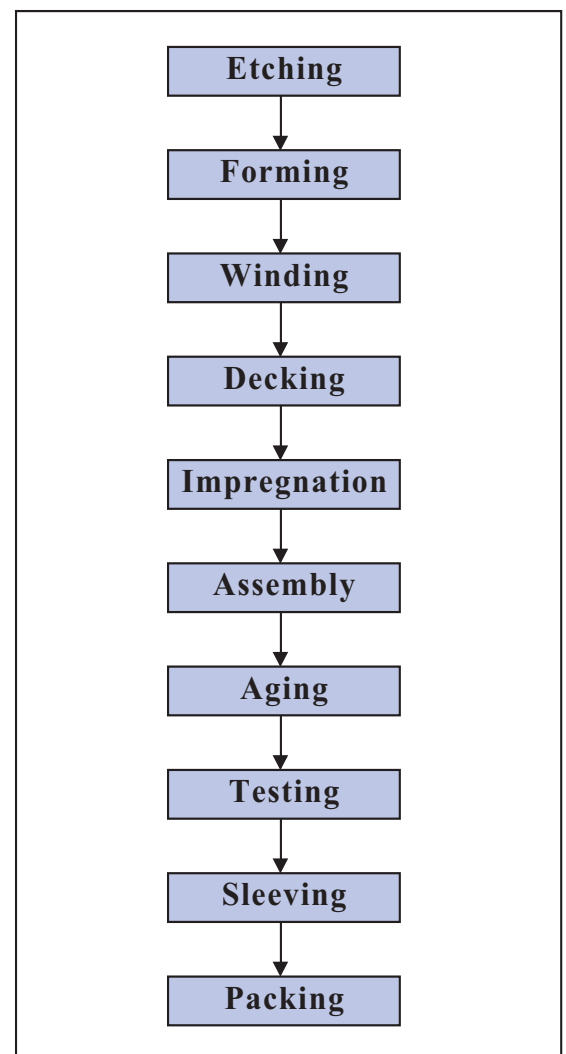
The following tests are applied and may be varied at the request of the customer. In this case the batch, or special procedure, will determine the course of action.

Electrical:

- Leakage current
- Capacitance
- ESR
- Impedance
- Tan Delta

Mechanical/Visual:

- Overall dimensions
- Torque test of mounting stud
- Print detail
- Box labels
- Packaging, including packed quantity



AC MOTOR START MOUNTING ACCESSORIES

TERMINALS



Type 'A'
Dual QC



Type 'C'
Single QC



Type 'X'
Dual QC
w/Solder Lug



Type 'W'
w/Female QC



Type 'W'
#18ga. Insulated,
Stranded Copper Wire
[Standard: 12-14" length with 1/2" stripped
ends(other length's available.)]

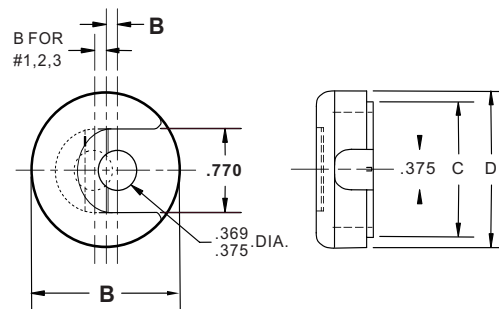
END CAPS



Standard

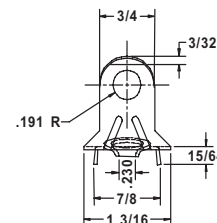
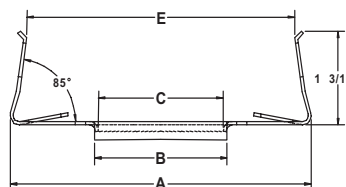
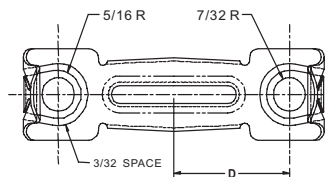


Type 'A'



Case #	P/N	Dia.	'A', ±0.010	'B', ±0.003	'C', ±0.005	'D', ±0.003
1,2,3	670400 0074	1 ⁷ / ₁₆	1.437	0.080	1.093	1.241
4&5	670400 0075	1 ¹³ / ₁₆	1.812	0.110	1.468	1.611
6&7	670400 0076	2 ¹ / ₁₆	2.062	0.235	1.718	1.866
8	670400 0102C	2 ⁹ / ₁₆	2.562	0.485	2.218	2.366

BRACKET



Case #	P/N	'A'	'B'	'C'	'D'	'E'
1	670036 0941	3.375	1.171	1.062	1.258	3.015
2,4,6	670036 0943	4.050	1.812	1.703	1.578	3.656
3,5,7,8	670036 0944	5.050	2.718	2.000	2.078	4.656

All dimensions ±0.015".

Material—0.042" Spring Steel.
Finish—Black Parkerize

STANDARD RATINGS FOR TYPE SCB1A EIA TYPE 1

Capacitance (µF) min. max.	Catalog Number	Case Code	Optional Case Code(s)
110 VOLTS AC			
21 25	SCB1A021B110AC1A	1	-
25 30	SCB1A025B110AC1A	1	-
30 36	SCB1A030B110AC1A	1	-
36 43	SCB1A036B110AC1A	1	-
43 52	SCB1A043B110AC1A	1	-
47 56	SCB1A047B110AC1A	1	-
53 64	SCB1A053B110AC1A	1	-
64 77	SCB1A064B110AC1A	1	-
72 86	SCB1A072B110AC1A	1	-
88 106	SCB1A088B110AC1A	1	-
108 130	SCB1A108B110AC1A	1	-
124 149	SCB1A124B110AC1A	1	-
130 156	SCB1A130B110AC1A	1	-
145 174	SCB1A145B110AC1A	1	-
161 193	SCB1A161B110AC1A	1	-
189 227	SCB1A189B110AD2A	2	-
216 259	SCB1A216B110AD2A	2	-
233 280	SCB1A233B110AD2A	2	-
243 292	SCB1A243B110BD4A	4	2,3
270 324	SCB1A270B110BD4A	4	2,3
324 389	SCB1A324B110BD4A	4	3
340 408	SCB1A340B110BD4A	4	3
378 454	SCB1A378B110BD4A	4	-
400 480	SCB1A400B110BD4A	4	-
430 516	SCB1A430B110BD4A	4	-
460 552	SCB1A460B110BD4A	4	-
540 648	SCB1A540B110CE7A	7	4,5,6
590 708	SCB1A590B110CE7A	7	-
645 774	SCB1A645B110CE7A	7	-
708 850	SCB1A708B110DE8A	8	7
815 978	SCB1A815B110DE8A	8	-
125 VOLTS AC			
21 25	SCB1A021B125AC1A	1	-
25 30	SCB1A025B125AC1A	1	-
30 36	SCB1A030B125AC1A	1	-
36 43	SCB1A036B125AC1A	1	-
43 52	SCB1A043B125AC1A	1	-
47 56	SCB1A047B125AC1A	1	-
53 64	SCB1A053B125AC1A	1	-
64 77	SCB1A064B125AC1A	1	-
72 86	SCB1A072B125AC1A	1	-
88 106	SCB1A088B125AC1A	1	-
108 130	SCB1A108B125AC1A	1	-
124 149	SCB1A124B125AC1A	1	-
130 156	SCB1A130B125AC1A	1	-
145 174	SCB1A145B125AD2A	2	-
161 193	SCB1A161B125AD2A	2	-
189 227	SCB1A189B125BD4A	2	1
216 259	SCB1A216B125BD4A	4	2,3
233 280	SCB1A233B125BD4A	4	2,3
243 292	SCB1A243B125BD4A	4	2,3
270 324	SCB1A270B125BD4A	4	2,3
324 389	SCB1A324B125BE5A	5	-

STANDARD RATINGS FOR TYPE SCB1A EIA TYPE 1

Capacitance (µF) min. max.	Catalog Number	Case Code	Optional Case Code(s)
125 VOLTS AC (CONTINUED)			
340 408	SCB1A340B125BE5A	5	4
378 454	SCB1A378B125BE5A	5	4
400 480	SCB1A400B125BE5A	5	4
430 516	SCB1A430B125CE7A	7	4,5,6
460 552	SCB1A460B125CE7A	7	4,5,6
540 648	SCB1A540B125DE8A	8	4,5,6,7
645 774	SCB1A645B125DE8A	8	7
165 VOLTS AC			
21 25	SCB1A021B165AC1A	1	-
25 30	SCB1A025B165AC1A	1	-
30 36	SCB1A030B165AC1A	1	-
36 43	SCB1A036B165AC1A	1	-
43 52	SCB1A043B165AC1A	1	-
47 56	SCB1A047B165AC1A	1	-
53 64	SCB1A053B165AC1A	1	-
64 77	SCB1A064B165AC1A	1	-
72 86	SCB1A072B165AC1A	1	-
88 106	SCB1A088B165AD2A	2	1
108 130	SCB1A108B165AD2A	2	-
124 149	SCB1A124B165BD4A	4	3
130 156	SCB1A130B165BD4A	4	3
145 174	SCB1A145B165BD4A	4	3
161 193	SCB1A161B165BD4A	4	-
189 227	SCB1A189B165BD4A	4	-
216 259	SCB1A216B165BE5A	5	-
233 280	SCB1A233B165BE5A	5	-
243 292	SCB1A243B165BE5A	5	-
270 324	SCB1A270B165BE5A	5	-
324 389	SCB1A324B165BE5A	5	-
340 408	SCB1A340B165CE7A	7	-
378 454	SCB1A378B165DE8A	8	-
400 480	SCB1A400B165DE8A	8	-
220 VOLTS AC			
21 25	SCB1A021B220AC1A	1	-
25 30	SCB1A025B220AC1A	1	-
30 36	SCB1A030B220AC1A	1	-
36 43	SCB1A036B220AD2A	2	1
43 52	SCB1A043B220AD2A	2	1
47 56	SCB1A047B220AD2A	2	1
53 64	SCB1A053B220BD4A	4	2,3
64 77	SCB1A064B220BD4A	4	2,3
72 86	SCB1A072B220BD4A	4	3
88 106	SCB1A088B220BD4A	4	-
108 130	SCB1A108B220BE5A	5	-
124 149	SCB1A124B220BE5A	5	-
130 156	SCB1A130B220BE5A	5	-
145 174	SCB1A145B220CE7A	7	-
161 193	SCB1A161B220DE8A	8	7
189 227	SCB1A189B220DE8A	8	7
216 259	SCB1A216B220DE8A	8	-
233 280	SCB1A233B220DE8A	8	-
243 292	SCB1A243B220DE8A	8	-
270 324	SCB1A270B220DE8A	8	-

STANDARD RATINGS FOR TYPE SCB1A EIA TYPE 1

Capacitance (μF)		Catalog Number	Case Code	Optional Case Code(s)
min.	max.			
250 VOLTS AC				
21	25	SCB1A021B250AC1A	1	-
25	30	SCB1A025B250AC1A	1	-
30	36	SCB1A030B250AD2A	2	1
36	43	SCB1A036B250AD2A	2	1
43	52	SCB1A043B250BD4A	4	1,2,3
47	56	SCB1A047B250BD4A	4	2,3
53	64	SCB1A053B250BD4A	4	2,3
64	77	SCB1A064B250BD4A	4	-
72	86	SCB1A072B250BD4A	4	-
88	106	SCB1A088B250BE5A	5	4
108	130	SCB1A108B250BE5A	5	4
124	149	SCB1A124B250CE7A	7	4,5,6
130	156	SCB1A130B250DE8A	8	5,6,7
145	174	SCB1A145B250DE8A	8	6,7
161	193	SCB1A161B250DE8A	8	7
189	227	SCB1A189B250DE8A	8	7
216	259	SCB1A216B250DE8A	8	7
233	280	SCB1A233B250DE8A	8	7
270	324	SCB1A270B250DE8A	8	7
330 VOLTS AC				
21	25	SCB1A021B330AD2A	2	-
25	30	SCB1A025B330AD2A	2	-
30	36	SCB1A030B330BD4A	4	3
36	43	SCB1A036B330BD4A	4	2,3
43	52	SCB1A043B330BD4A	4	-
47	56	SCB1A047B330BD4A	4	-
53	64	SCB1A053B330BE5A	5	4
64	77	SCB1A064B330BE5A	5	-
72	86	SCB1A072B330BE5A	5	-
88	106	SCB1A088B330CE7A	7	-
108	130	SCB1A108B330DE8A	8	7
124	149	SCB1A124B330DE8A	8	7
130	156	SCB1A130B330DE8A	8	7
145	174	SCB1A145B330DE8A	8	7
161	193	SCB1A161B330DE8A	8	7
189	227	SCB1A189B250DE8A	8	7

STANDARD RATINGS FOR TYPE SCB2A EIA TYPE 2

Capacitance (µF)		Catalog Number	Case Code	Optional Case Code(s)
min.	max.			
110 VOLTS AC				
21	25	SCB2A021B110AC1A	1	-
25	30	SCB2A025B110AC1A	1	-
30	36	SCB2A030B110AC1A	1	-
36	43	SCB2A036B110AC1A	1	-
43	52	SCB2A043B110AC1A	1	-
47	56	SCB2A047B110AC1A	1	-
53	64	SCB2A053B110AC1A	1	-
64	77	SCB2A064B110AC1A	1	-
72	86	SCB2A072B110AC1A	1	-
88	106	SCB2A088B110AC1A	1	-
108	130	SCB2A108B110AC1A	1	-
124	149	SCB2A124B110AC1A	1	-
130	156	SCB2A130B110AC1A	1	-
145	174	SCB2A145B110AC1A	1	-
161	193	SCB2A161B110AC1A	1	-
189	227	SCB2A189B110AC1A	1	-
216	259	SCB2A216B110AD2A	2	-
233	280	SCB2A233B110AD2A	2	-
243	292	SCB2A243B110AD2A	2	-
270	324	SCB2A270B110AD2A	2	-
324	389	SCB2A324B110BD4A	4	2,3
340	408	SCB2A340B110BD4A	4	3
378	454	SCB2A378B110BD4A	4	3
400	480	SCB2A400B110BD4A	4	-
430	516	SCB2A430B110BD4A	4	-
460	552	SCB2A460B110BD4A	4	3
540	648	SCB2A540B110BE5A	5	-
590	708	SCB2A590B110BE5A	5	-
645	774	SCB2A645B110CE7A	7	-
708	850	SCB2A708B110CE7A	7	5,6
720	864	SCB2A720B110CE7A	7	-
800	960	SCB2A800B110CE7A	7	-
815	978	SCB2A815B110CE7A	7	5,6
829	995	SCB2A829B110CE7A	7	-
850	1020	SCB2A850B110DE8A	8	7
1000	1200	SCB2A1000B110DE8A	8	-
1020	1224	SCB2A1020B110DE8A	8	7
1175	1410	SCB2A1175B110DE8A	8	7
1280	1536	SCB2A1280B110DE8A	8	-
125 VOLTS AC				
21	25	SCB2A021B125AC1A	1	-
25	30	SCB2A025B125AC1A	1	-
30	36	SCB2A030B125AC1A	1	-
36	43	SCB2A036B125AC1A	1	-
43	52	SCB2A043B125AC1A	1	-
47	56	SCB2A047B125AC1A	1	-
53	64	SCB2A053B125AC1A	1	-
64	77	SCB2A064B125AC1A	1	-
72	86	SCB2A072B125AC1A	1	-
88	106	SCB2A088B125AC1A	1	-
108	130	SCB2A108B125AC1A	1	-
124	149	SCB2A124B125AC1A	1	-

STANDARD RATINGS FOR TYPE SCB2A EIA TYPE 2

Capacitance (µF) min.	max.	Catalog Number	Case Code	Optional Case Code(s)
125 VOLTS AC (CONTINUED)				
130	156	SCB2A130B125AC1A	1	-
145	174	SCB2A145B125AC1A	1	-
161	193	SCB2A161B125AC1A	1	-
189	227	SCB2A189B125AD2A	2	-
216	259	SCB2A216B125AD2A	2	-
233	280	SCB2A233B125AD2A	2	-
243	292	SCB2A243B125AD2A	2	3
270	324	SCB2A270B125AD2A	2	3
324	389	SCB2A324B125BD4A	4	3
340	408	SCB2A340B125BD4A	4	3
378	454	SCB2A378B125BD4A	4	3
400	480	SCB2A400B125BD4A	4	3
430	516	SCB2A430B125BD4A	4	3
460	552	SCB2A460B125BD4A	4	3
540	648	SCB2A540B125BE5A	5	4
590	708	SCB2A590B125CE7A	7	5,6
645	774	SCB2A645B125CE7A	7	-
708	850	SCB2A708B125CE7A	7	5,6
720	864	SCB2A720B125CE7A	7	-
800	960	SCB2A800B125CE7A	7	-
815	978	SCB2A815B125CE7A	7	-
829	995	SCB2A829B125DE8A	8	-
850	1020	SCB2A850B125DE8A	8	-
1000	1200	SCB2A1000B125DE8A	8	-
1020	1224	SCB2A1020B125DE8A	8	7
1175	1410	SCB2A1175B125DE8A	8	7
165 VOLTS AC				
21	25	SCB2A021B165AC1A	1	-
25	30	SCB2A025B165AC1A	1	-
30	36	SCB2A030B165AC1A	1	-
36	43	SCB2A036B165AC1A	1	-
43	52	SCB2A043B165AC1A	1	-
47	56	SCB2A047B165AC1A	1	-
53	64	SCB2A053B165AC1A	1	-
64	77	SCB2A064B165AC1A	1	-
72	86	SCB2A072B165AC1A	1	-
88	106	SCB2A088B165AC1A	1	-
108	130	SCB2A108B165AD2A	2	-
124	149	SCB2A124B165AD2A	2	-
130	156	SCB2A130B165BD4A	4	2,3
145	174	SCB2A145B165BD4A	4	2,3
161	193	SCB2A161B165BD4A	4	2,3
189	227	SCB2A189B165BD4A	4	2,3
216	259	SCB2A216B165BD4A	4	3
233	280	SCB2A233B165BE5A	5	3,4
243	292	SCB2A243B165BE5A	5	3,4
270	324	SCB2A270B165BE5A	5	3,4
324	389	SCB2A324B165BE5A	5	4
340	408	SCB2A340B165CE7A	7	5,6
378	454	SCB2A378B165CE7A	7	5,6
400	480	SCB2A400B165DE8A	8	5,6,7
460	552	SCB2A460B165DE8A	8	5,6,7
540	648	SCB2A540B165DE8A	8	7

STANDARD RATINGS FOR TYPE SCB2A EIA TYPE 2

Capacitance (µF) min.	max.	Catalog Number	Case Code	Optional Case Code(s)
165 VOLTS AC (CONTINUED)				
590	708	SCB2A590B165DE8A	8	7
645	774	SCB2A645B165DE8A	8	-
708	850	SCB2A708B165DE8A	8	7
720	864	SCB2A720B165DE8A	8	-
800	960	SCB2A800B165DE8A	8	-
815	978	SCB2A815B165DE8A	8	-
829	995	SCB2A829B165DE8A	8	-
850	1020	SCB2A850B165DE8A	8	-
220 VOLTS AC				
21	25	SCB2A021B220AC1A	1	-
25	30	SCB2A025B220AC1A	1	-
30	36	SCB2A030B220AC1A	1	-
36	43	SCB2A036B220AC1A	1	-
43	52	SCB2A043B220AD2A	2	-
47	56	SCB2A047B220AD2A	2	-
53	64	SCB2A053B220AD2A	2	-
64	77	SCB2A064B220BD4A	4	2,3
72	86	SCB2A072B220BD4A	4	3
88	106	SCB2A088B220BD4A	4	3
108	130	SCB2A108B220BD4A	4	-
124	149	SCB2A124B220BE5A	5	-
130	156	SCB2A130B220BE5A	5	-
145	174	SCB2A145B220CE7A	7	5,6
161	193	SCB2A161B220CE7A	7	5,6
189	227	SCB2A189B220CE7A	7	-
216	259	SCB2A216B220DE8A	8	7
233	280	SCB2A233B220DE8A	8	7
243	292	SCB2A243B220DE8A	8	7
270	324	SCB2A270B220DE8A	8	7
324	389	SCB2A324B220DE8A	8	7
340	408	SCB2A340B220DE8A	8	-
378	454	SCB2A378B220DE8A	8	-
400	480	SCB2A400B220DE8A	8	-
430	516	SCB2A430B220DE8A	8	-
250 VOLTS AC				
21	25	SCB2A021B250AC1A	1	-
25	30	SCB2A025B250AC1A	1	-
30	36	SCB2A030B250AD2A	2	-
36	43	SCB2A036B250AD2A	2	-
43	52	SCB2A043B250AD2A	2	-
47	56	SCB2A047B250AD2A	2	-
53	64	SCB2A053B250BD4A	4	2,3
64	77	SCB2A064B250BD4A	4	2,3
72	86	SCB2A072B250BD4A	4	3
88	106	SCB2A088B250BE5A	5	3,4
108	130	SCB2A108B250BE5A	5	-
124	149	SCB2A124B250BE5A	5	-
130	156	SCB2A130B250BE5A	5	-
145	174	SCB2A145B250CE7A	7	-
161	193	SCB2A161B250CE7A	7	-
189	227	SCB2A189B250DE8A	8	-
216	259	SCB2A216B250DE8A	8	-
233	280	SCB2A233B250DE8A	8	-

STANDARD RATINGS FOR TYPE SCB2A EIA TYPE 2

Capacitance (μF)		Catalog Number	Case Code	Optional Case Code(s)
min.	max.			
250 VOLTS AC (CONTINUED)				
243	292	SCB2A243B250DE8A	8	-
270	324	SCB2A270B250DE8A	8	-
324	389	SCB2A324B250DE8A	8	-
340	408	SCB2A340B250DE8A	8	-
378	454	SCB2A378B250DE8A	8	-
400	480	SCB2A400B250DE8A	8	-
430	516	SCB2A430B250DE8A	8	-
330 VOLTS AC				
21	25	SCB2A021B330AC2A	2	1
25	30	SCB2A025B330AC2A	2	1
30	36	SCB2A030B330BD4A	4	1,2,3
36	43	SCB2A036B330BD4A	4	2,3
43	53	SCB2A043B330BD4A	4	3
47	56	SCB2A047B330BD4A	4	3
53	64	SCB2A053B330BE5A	5	3,4
64	77	SCB2A064B330BE5A	5	-
72	86	SCB2A072B330BE5A	5	-
88	106	SCB2A088B330CE7A	7	5,6,7
108	130	SCB2A108B330DE8A	8	7
124	149	SCB2A124B330DE8A	8	7
130	156	SCB2A130B330DE8A	8	7
145	174	SCB2A145B330DE8A	8	7
161	193	SCB2A161B330DE8A	8	-
189	227	SCB2A189B330DE8A	8	-
216	259	SCB2A216B330DE8A	8	-
233	280	SCB2A233B330DE8A	8	-
243	292	SCB2A243B330DE8A	8	-
270	324	SCB2A270B330DE8A	8	-