

**SURFACE MOUNT**

- Standard footprints
- 125°C operation (with de-rating)

The SHJ series compliments the well-known SH for users requiring surface-mount.

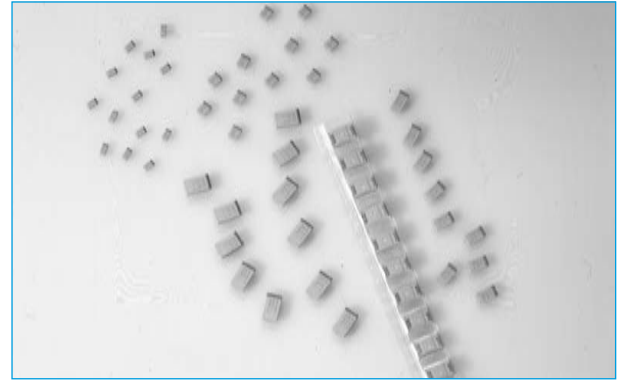
All product is supplied on plastic embossed tape as standard in full reel sizes.

Please note: as technology improves size reduction may be possible. If in doubt please call Sales office.

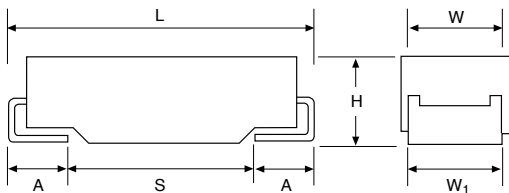
**Low profile available.**

**Temperature** -55 to +125°C (with voltage de-rating)  
**Life Time** 2,000 Hours @ +85°C  
**Tolerance** ± 10% standard (± 20% available)

**TANTALUM CHIP SHJ**



**OUTLINE DRAWING**



Code	EIA	W+0.2 Code	L±0.2 -0.1	H+0.2	W <sub>1</sub> ±0.2 -0.1	A+0.3	S Min. -0.2
A	3216	1.6	3.2	1.6	1.2	0.8	1.1
B	3528	2.8	3.5	1.9	2.2	0.8	1.4
C	6032	3.2	6.0	2.6	2.2	1.3	2.9
D	7343	4.3	7.3	2.9	2.4	1.3	4.4
E	7343H	4.3	7.3	4.1	2.4	1.3	4.4

All dimensions in mm.  
 W1 dimension applies to the termination width for A dimensional area only.. Pad Stand-off is 0.1 ± 0.1

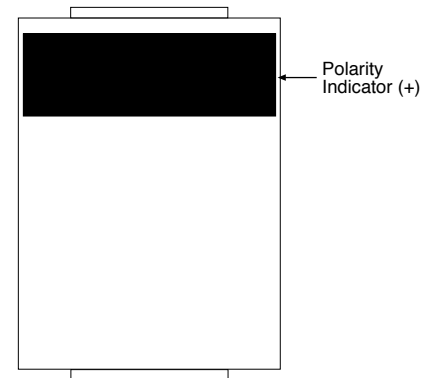
**REEL SIZES**

Case	Reel Size
A	2,000
B	2,000
C	500
D	500
E	400/500

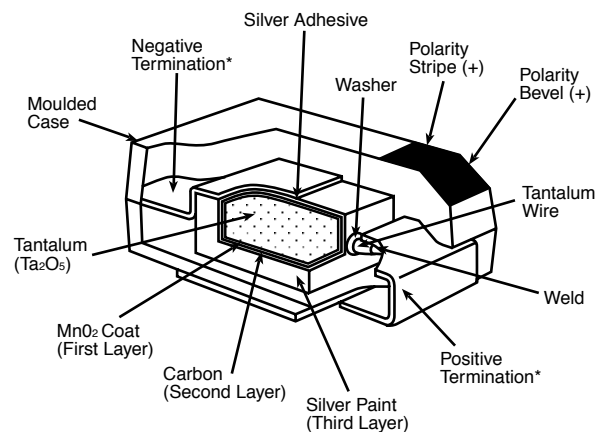
**ORDERING INFORMATION**

SHJ	B	10	16	K
Dubilier Tant SMT	Case size	µf value	Voltage	Tolerance
				K = 10% M = 20%

**POLARITY**



**CONSTRUCTION DIAGRAM**



\*Termination Solder Coating Sn

RANGE & CASE CODES

Capacitance uF	Rated Voltage DC							
	4V	6.3V	10V	16V	20V	25V	35V	50V
	std/ext	std/ext	std/ext	std/ext	std/ext	std/ext	std/ext	std/ext
0.1							A	A
0.15							A	B/A
0.22							A	B
0.33							A	B
0.47						A	B/A	C/B
0.68					A	A	B/A	C/B
1.0				A	A	A	B/A	C
1.5			A	A	A	B/A	C/B	D/C
2.2		A	A	A	B/A	B	C/B	D/C
3.3	A	A	A	B/A	B/A	C/B	C/B	D
4.7	A	A	B/A	B/A	C/B/A	C/B/A	D/C/B	D
6.8	A	B/A	B/A	C/B/A	C/B/A	C/B	D/C	E/D
10	B/A	B/A	C/B/A	C/B/A	C/B	D/C	D/C	E/D
15	B/A	C/B/A	C/B/A	C/B/A	D/C	D/C	D/C	E
22	C/B/A	C/B/A	C/B/A	D/C/B	D/C	D/C	E/D	
33	C/B/A	C/B/A	D/C/B	D/C	D	E/D	E	
47	C/B/A	D/C/B	D/C/B	D/C	D	E/D	E	
68	D/CB	D/C	D/C/B	D	E/D	E		
100	D/CB	D/C/B	D/C	E/D	E			
150	D/C	D/C	E/D/C	E/D				
220	B	E/D/C	E/D	E				
330	D/C	E/D	E					
470	E/D	E/D	E					

RATINGS & NUMBER REFERENCE

Part No.	Case Size	Capacitance μF	IL (μA)	DF % max	ESR max (Ω) @100KHz
<b>4 volts</b>					
SHJA3.34	A	3.3	0.5	6.0	9.0
SHJA4.74	A	4.7	0.5	6.0	8.0
SHJA6.84	A	6.8	0.5	6.0	6.5
SHJA104	A	10	0.5	6.0	6.0
SHJA154	A	15	0.6	6.0	4.0
SHJA224	A	22	0.9	6.0	4.0
SHJA334	A	33	1.3	6.0	4.0
SHJA474	A	47	1.9	12.0	2.5
SHJB104	B	10	0.5	6.0	4.0
SHJB154	B	15	0.6	6.0	3.0
SHJB224	B	22	0.9	6.0	3.5
SHJB334	B	33	1.4	6.0	3.5
SHJB474	B	47	1.9	6.0	3.0
SHJB684	B	68	2.7	6.0	3.5
SHJB1004	B	100	4.0	8.0	0.9
SHJB2204	B	220	8.8	18.0	0.5
SHJC224	C	22	1.4	6.0	2.3
SHJC334	C	33	1.9	6.0	2.0
SHJC474	C	47	1.9	6.0	1.8
SHJC684	C	68	2.7	6.0	1.6
SHJC1004	C	100	4.0	6.0	1.2
SHJC1504	C	150	6.0	8.0	1.2
SHJC3304	C	330	13.2	10.0	0.9
SHJD684	D	68	2.7	6.0	0.8
SHJD1004	D	100	4.0	6.0	0.9
SHJD1504	D	150	6.0	6.0	0.9
SHJD3304	D	330	21.0	8.0	0.8
SHJD4704	D	470	18.8	8.0	0.8
SHJD6804	D	680	27.0	12.0	0.9
SHJE6804	E	680	27.0	12.0	0.6
SHJE4704	E	470	29.6	8.0	0.6

Part No.	Case Size	Capacitance μF	IL (μA)	DF % max	ESR max (Ω) @100KHz
<b>6.3 volts</b>					
SHJA2.26.3	A	2.2	0.5	6.0	9.0
SHJA3.36.3	A	3.3	0.5	6.0	7.0
SHJA156.3	A	15	1.0	6.0	3.5
SHJA226.3	A	22	1.4	6.0	4.0
SHJA336.3	A	33	2.0	12.0	2.5
SHJB6.86.3	B	6.8	0.5	6.0	4.0
SHJB106.3	B	10	0.6	6.0	3.0
SHJB1006.3	B	100	6.3	15.0	3.0
SHJB336.3	B	33	2.1	6.0	3.0
SHJB476.3	B	47	3.0	6.0	2.0
SHJC156.3	C	15	1.0	6.0	1.9
SHJC226.3	C	22	1.4	6.0	2.0
SHJC1006.3	C	100	6.3	6.0	0.9
SHJC1506.3	C	150	9.0	8.0	1.2
SHJC2206.3	C	220	13.2	10.0	1.2
SHJD476.3	D	47	3.0	6.0	0.9
SHJD686.3	D	68	4.3	6.0	0.9
SHJD2206.3	D	220	13.9	8.0	0.9
SHJD3306.3	D	330	19.8	8.0	0.5
SHJD4706.3	D	470	28.2	12.0	0.4
SHJE2206.3	E	220	13.2	8.0	0.9
SHJE3306.3	E	330	19.8	8.0	0.5
SHJE4706.3	E	470	29.6	8.0	0.5

## RATINGS &amp; NUMBER REFERENCE (CONTINUED)

Part No.	Case Size	Capacitance $\mu\text{F}$	IL ( $\mu\text{A}$ )	DF % max	ESR max ( $\Omega$ ) @100KHz
10 volts					
SHJA1.510	A	1.5	0.5	6.0	10.0
SHJA2.210	A	2.2	0.5	6.0	8.0
SHJA6.810	A	6.8	0.7	6.0	4.0
SHJA1010	A	10	1.0	6.0	4.0
SHJA1510	A	10	1.5	8.0	6.0
SHJA2210	A	22	2.2	10.0	6.0
SHJB4.710	B	4.7	0.5	6.0	4.0
SHJB6.810	B	6.8	0.7	6.0	3.0
SHJB3310	B	33	3.3	6.0	1.8
SHJB4710	B	47	4.7	8.0	1.0
SHJB6810	B	68	6.8	10.0	3.0
SHJC1010	C	10	1.0	6.0	2.0
SHJC1510	C	15	1.5	6.0	2.0
SHJC4710	C	47	4.7	6.0	1.2
SHJC6810	C	68	6.8	6.0	1.2
SHJC10010	C	100	10.0	8.0	1.2
SHJC15010	C	150	15.0	10.0	0.9
SHJD3310	D	33	3.3	6.0	0.8
SHJD4710	D	47	4.7	6.0	0.9
SHJD15010	D	150	15.0	8.0	0.9
SHJD22010	D	220	22.0	8.0	0.5
SHJE15010	E	150	15.0	6.0	0.9
SHJE22010	E	220	22.0	8.0	0.5
SHJE33010	E	330	33.0	8.0	0.9
SHJE47010	E	470	47.0	10.0	0.2
16 volts					
SHJA116	A	1	0.5	4.0	11.0
SHJA1.516	A	1.5	0.5	6.0	8.0
SHJA4.716	A	4.7	0.8	6.0	4.0
SHJA6.816	A	6.8	1.1	6.0	3.5
SHJA1016	A	10	1.6	8.0	7.0
SHJA1516	A	15	2.4	8.0	3.5
SHJB3.316	B	3.3	0.5	6.0	4.5
SHJB4.716	B	4.7	0.8	6.0	3.5
SHJB1516	B	15	2.4	6.0	2.5
SHJB2216	B	22	3.6	6.0	2.2
SHJC6.816	C	6.8	1.1	6.0	2.5
SHJC1016	C	10	1.6	6.0	2.0
SHJC3316	C	33	5.3	6.0	1.5
SHJC4716	C	47	7.5	6.0	1.2
SHJD2216	D	22	3.5	6.0	0.8
SHJD3316	D	33	5.3	6.0	0.9
SHJD10016	D	100	16.0	6.0	0.9
SHJD15016	D	150	24.0	12.0	0.7
SHJE10016	E	100	16.0	6.0	0.9
SHJE15016	E	150	24.0	8.0	0.5
SHJE22016	E	220	35.2	8.0	0.5
20 volts					
SHJA0.6820	A	0.68	0.5	4.0	12.0
SHJA120	A	1	0.5	4.0	9.0
SHJA2.220	A	2.2	0.5	6.0	7.0
SHJA3.320	A	3.3	0.7	6.0	4.5
SHJA4.720	A	4.7	1.0	6.0	4.0
SHJA6.820	A	6.8	1.4	8.0	6.0
SHJB2.220	B	2.2	0.5	6.0	3.5
SHJB3.320	B	3.3	0.7	6.0	3.0
SHJB6.820	B	6.8	1.4	6.0	2.5
SHJB1020	B	10	2.0	6.0	2.1
SHJC4.720	C	4.7	1.0	6.0	2.8
SHJC6.820	C	6.8	1.4	6.0	2.0
SHJC2220	C	22	4.4	6.0	1.2
SHJD1520	D	15	3.0	6.0	1.1
SHJD2220	D	22	4.4	6.0	0.9
SHJD3320	D	33	6.6	6.0	0.9
SHJD4720	D	47	9.4	6.0	0.9
SHJD6820	D	68	13.6	8.0	0.7
SHJE6820	E	68	13.6	6.0	0.9
SHJE10020	E	100	20.0	8.0	0.5

Part No.	Case Size	Capacitance $\mu\text{F}$	IL ( $\mu\text{A}$ )	DF % max	ESR max ( $\Omega$ ) @100KHz
25 volts					
SHJA0.4725	A	0.47	0.5	4.0	14.0
SHJA0.6825	A	0.68	0.5	4.0	10.0
SHJA1.525	A	1.5	0.5	6.0	7.5
SHJA4.725	A	4.7	1.2	8.0	6.0
SHJB1.525	B	1.5	0.5	6.0	5.0
SHJB2.225	B	2.2	0.6	6.0	4.5
SHJB4.725	B	4.7	1.2	6.0	1.5
SHJB6.825	B	6.8	1.7	8.0	2.8
SHJC3.325	C	3.3	0.9	6.0	2.8
SHJC4.725	C	4.7	1.2	6.0	2.4
SHJC1525	C	15	3.8	6.0	1.5
SHJC2225	C	22	5.5	6.0	1.4
SHJD6.825	D	6.8	1.7	6.0	1.9
SHJD1025	D	10	2.5	6.0	1.2
SHJD1525	D	15	3.8	6.0	1.0
SHJD3325	D	33	6.6	6.0	0.9
SHJD4725	D	47	11.8	10.0	0.7
SHJE3325	E	33	8.3	6.0	0.9
SHJE4725	E	47	11.7	8.0	0.9
SHJE6825	E	68	17.0	8.0	0.7
35 volts					
SHJA0.135	A	0.1	0.5	4.0	24.0
SHJA0.1535	A	0.15	0.5	4.0	21.0
SHJA0.2235	A	0.22	0.5	4.0	18.0
SHJA0.3335	A	0.33	0.5	4.0	15.0
SHJA0.4735	A	0.47	0.5	4.0	12
SHJA135	A	1	0.5	4.0	7.5
SHJB0.4735	B	0.47	0.5	4.0	10.0
SHJB0.6835	B	0.68	0.5	4.0	8.0
SHJB135	B	1	0.5	4.0	5.0
SHJB3.335	B	3.3	1.2	6.0	3.5
SHJB4.735	B	4.7	1.6	6.0	3.1
SHJC1.535	C	1.5	0.5	6.0	4.5
SHJC2.235	C	2.2	0.8	6.0	3.5
SHJC3.335	C	3.3	1.2	6.0	2.5
SHJC6.835	C	6.8	2.4	6.0	1.8
SHJC1035	C	10	3.5	6.0	1.6
SHJC1535	C	15	5.3	6.0	1.4
SHJD4.735	D	4.7	1.6	6.0	1.5
SHJD6.835	D	6.8	2.4	6.0	1.3
SHJD1035	D	10	3.5	6.0	1.0
SHJD2235	D	22	7.7	6.0	0.7
SHJE2235	E	22	7.7	6.0	0.9
SHJE3335	E	33	8.3	6.0	0.6
SHJE4735	E	47	16.5	8.0	0.6
50 volts					
SHJA0.150	A	0.1	0.5	4.0	22.0
SHJB0.1550	B	0.15	0.5	4.0	17.0
SHJB0.2250	B	0.22	0.5	4.0	14.0
SHJB0.3350	B	0.33	0.5	4.0	10.0
SHJB0.4750	B	0.47	0.5	4.0	10.0
SHJB0.6850	B	0.68	0.5	4.0	8.0
SHJC0.4750	C	0.47	0.5	4.0	8.0
SHJC0.6850	C	0.68	0.5	4.0	7.0
SHJC150	C	1	0.5	4.0	5.5
SHJC1.550	C	1.5	0.8	6.0	4.5
SHJC2.250	C	2.2	1.1	6.0	3.2
SHJD1.550	D	1.5	0.8	6.0	4.0
SHJD2.250	D	2.2	1.1	6.0	2.5
SHJD3.350	D	3.3	1.7	6.0	2.0
SHJD4.750	D	4.7	2.4	6.0	1.4
SHJD1050	D	10	5.0	6.0	0.8
SHJE6.850	E	6.8	3.4	6.0	1.0
SHJE1050	E	10	5.0	8.0	0.7
SHJE1550	E	15	7.5	8.0	0.7

All technical data relates to an ambient temperature of +25°C measured at 120Hz, 0.5V RMS unless otherwise stated.

DUBILIER RESERVES THE RIGHT TO SUPPLY HIGHER VOLTAGE RATINGS IN THE SAME CASE SIZE WITH THE SAME RELIABILITY STANDARDS.