

RVS SERIES

85°C, Lead Free Reflow Soldering.

◆ **FEATURES**

- Case Dia $\phi 3 \sim \phi 18 \text{mm}$
- Lead free reflow soldering is available.
- Available for high density mounting.



◆ **SPECIFICATIONS**

Items	Characteristics																																												
Category Temperature Range	-40~+85°C																																												
Rated Voltage Range	4~100V.DC																																												
Capacitance Tolerance	$\pm 20\%$ (20°C,120Hz)																																												
Leakage Current(MAX)	$I = 0.01CV$ or $3\mu A$ whichever is greater. (After 2 minutes application of rated voltage) $I = \text{Leakage Current}(\mu A)$ $C = \text{Rated Capacitance}(\mu F)$ $V = \text{Rated Voltage}(V)$																																												
Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>(20°C,120Hz)</th> </tr> </thead> <tbody> <tr> <td>$\phi 3$</td> <td>0.40</td> <td>0.30</td> <td>-</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.14</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>$\phi 4, \phi 5, \phi 6.3 \times 5.5$</td> <td>0.40</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>$\phi 6.3 \times 8, \phi 8 \sim \phi 18$</td> <td>0.50</td> <td>0.35</td> <td>0.26</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> <td></td> </tr> </tbody> </table> <p>When rated capacitance is over 1000μF, $\tan \delta$ shall be added 0.02 to the listed value with increase of every 1000μF.</p>	Rated Voltage (V)	4	6.3	10	16	25	35	50	63	100	(20°C,120Hz)	$\phi 3$	0.40	0.30	-	0.20	0.16	0.14	0.14	-	-		$\phi 4, \phi 5, \phi 6.3 \times 5.5$	0.40	0.26	0.22	0.18	0.16	0.13	0.12	-	-		$\phi 6.3 \times 8, \phi 8 \sim \phi 18$	0.50	0.35	0.26	0.20	0.16	0.14	0.12	0.12	0.10	
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Endurance	<p>After applying rated voltage with rated ripple current for 2000 hrs at 85°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within $\pm 25\%$ of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>	Capacitance Change	Within $\pm 25\%$ of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																																						
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>$Z(-25^\circ C)/Z(20^\circ C)$</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>$Z(-40^\circ C)/Z(20^\circ C)$</td> <td>15</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> <td></td> </tr> </tbody> </table>	Rated Voltage (V)	4	6.3	10	16	25	35	50	63	100	(120Hz)	$Z(-25^\circ C)/Z(20^\circ C)$	7	4	3	2	2	2	2	2	2		$Z(-40^\circ C)/Z(20^\circ C)$	15	8	8	4	4	3	3	5	5												
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◆ **MULTIPLIER FOR RIPPLE CURRENT**

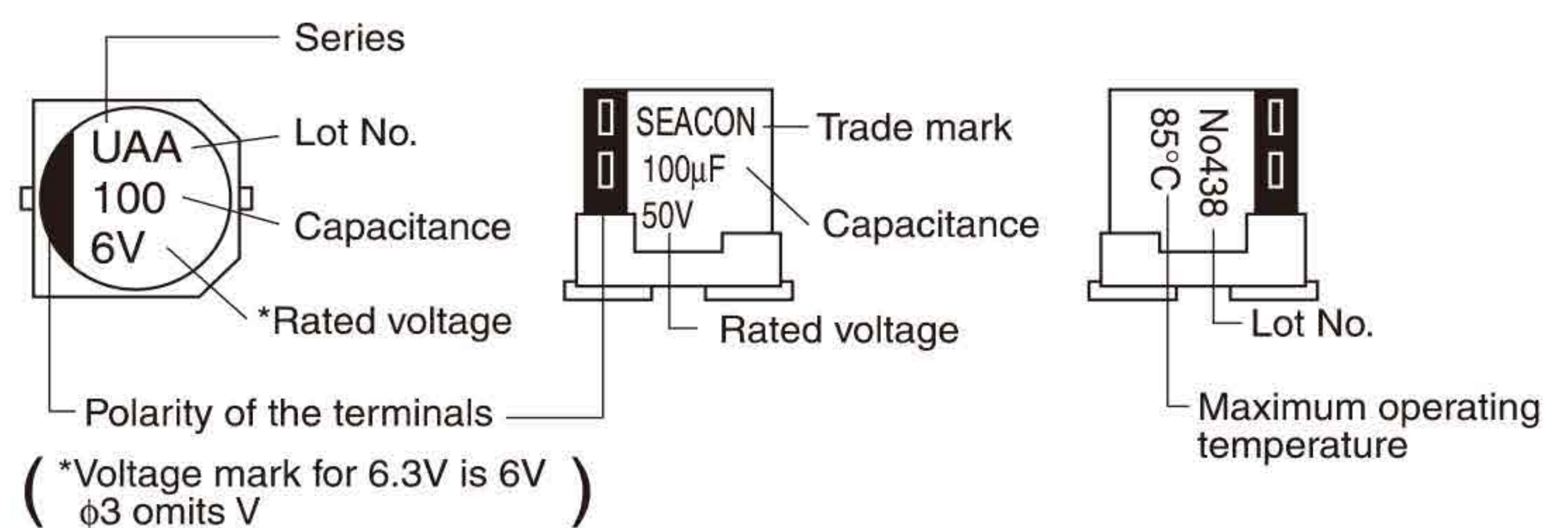
Frequency coefficient

Frequency (Hz)	60(50)	120	500	1k	10k \leq
0.1~1 μF	0.50	1.00	1.20	1.30	1.50
2.2~4.7 μF	0.65	1.00	1.20	1.30	1.50
10~47 μF	0.80	1.00	1.20	1.30	1.50
100~1000 μF	0.80	1.00	1.10	1.15	1.20
2200~10000 μF	0.80	1.00	1.05	1.10	1.15

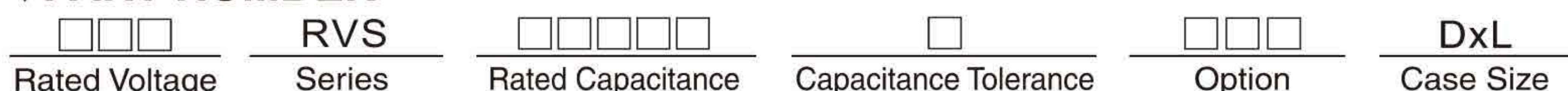
◆ **MARKING**

($\phi 3 \sim \phi 6.3, \phi 8 \times 6.5$)

($\phi 8 \times 10.5, \phi 10 \sim \phi 18$)

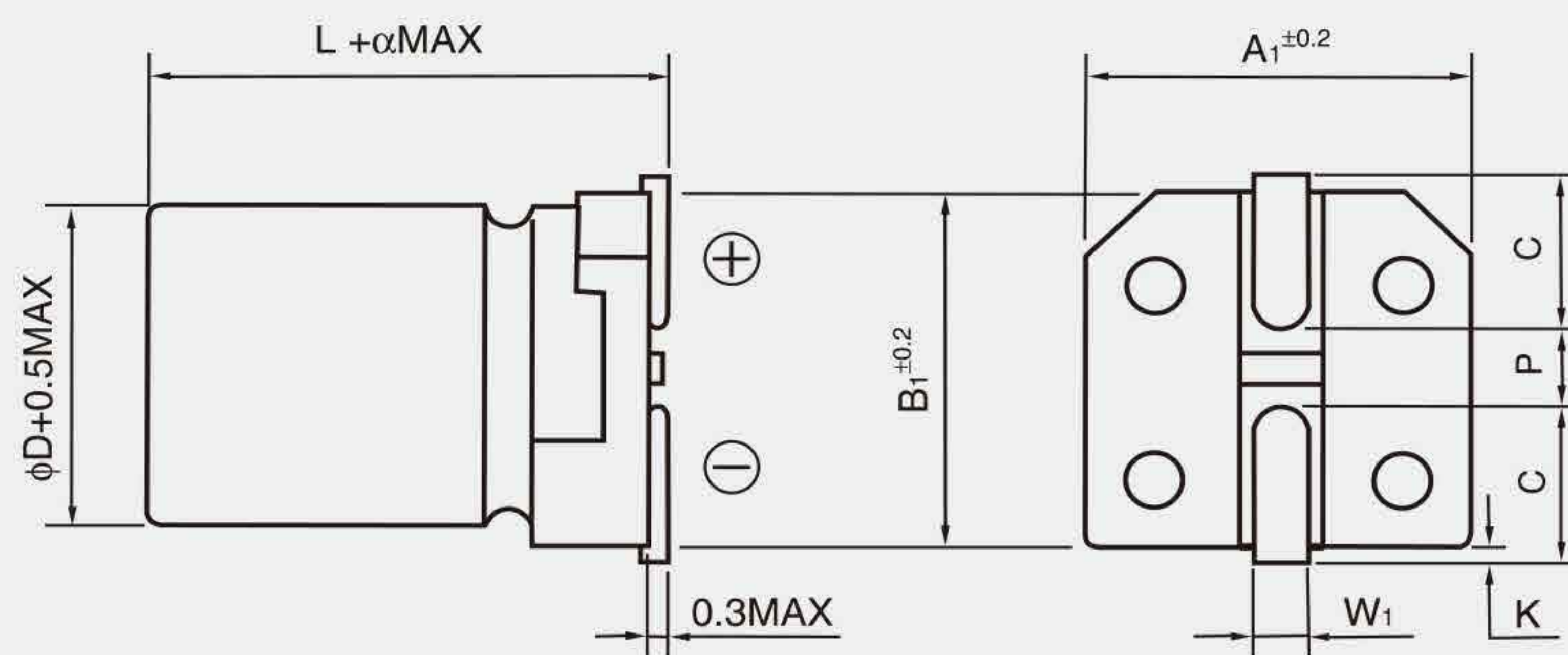


◆ **PART NUMBER**



◆ DIMENSIONS

(mm)



$\phi 8 \times 10.5 \sim \phi 18$ have sleeve.

ϕD	L	A ₁	B ₁	C	W ₁	P	K	α
3	5.5	3.3	3.3	1.5	0.45~0.8	0.8	0.5 MAX	0
4	5.5	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	5.5	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	5.5	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	0
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5 MAX	0
12.5	13.5	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
12.5	16	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
16	16.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
16	21.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
18	16.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5
18	21.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5

◆ STANDARD SIZE, RATED RIPPLE CURRENT

Size $\phi D \times L$ (mm), Ripple Current (mA r.m.s./85°C, 120Hz)

WV(V.DC) Cap(μF)	4 (OG)		6.3 (OJ)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		100 (2A)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1													3X5.5	1.0				
0.22													3X5.5	2.0				
0.33													3X5.5	2.8				
0.47													3X5.5	4.0				
1													3X5.5	8.0				
2.2												3X5.5	8.4	3X5.5	10			
3.3												3X5.5	10	4X5.5	17			
4.7							3X5.5	12	3X5.5	12	4X5.5	18	4X5.5	18			8X10.5	80
10							3X5.5	18	4X5.5	25	5X5.5	30	5X5.5	30			8X10.5	90
22	3X5.5	19	3X5.5	21			4X5.5	30			6.3X5.5	48	6.3X5.5	48	8X10.5	75	8X10.5	130
33	4X5.5	28			4X5.5	32	5X5.5	43	6.3X5.5	54	6.3X5.5	58	6.3X8	95	8X10.5	160	10X10.5	170
47	4X5.5	34	4X5.5	36			5X5.5	50	6.3X5.5	60	6.3X8	105	8X10.5	240	8X10.5	170	12.5X13.5	250
100	5X5.5	61	5X5.5	61	6.3X5.5	71	6.3X5.5	86	6.3X8	145	8X10.5	280	8X10.5	320	10X10.5	240	12.5X16	440
220	6.3X5.5	96	6.3X5.5	96	6.3X8	175	6.3X8	165	8X10.5	300	10X10.5	570	12.5X13.5	580	12.5X16	580	16X21.5	665
330			6.3X8	190	8X10.5	330	8X10.5	330	10X10.5	680			12.5X13.5	600	18X16.5	680	18X21.5	825
470	6.3X8	200	8X10.5	380	8X10.5	380	8X10.5	385	12.5X13.5	700	12.5X13.5	700	16X16.5	740	16X21.5	850		
1000			10X10.5	700	12.5X13.5	710	12.5X13.5	720	12.5X16	820	16X16.5	1000	18X21.5	1150				
2200			12.5X16	890	12.5X16	960	16X16.5	1150	16X21.5	1350	18X21.5	1550						
3300			16X16.5	1200	16X16.5	1300	16X21.5	1450	18X21.5	1700								
4700			16X16.5	1400	16X21.5	1500	18X21.5	1750										
6800			16X21.5	1650	18X21.5	1850												
10000			18X21.5	2000														