



CAIA SERIES: Snap-In Terminal Types



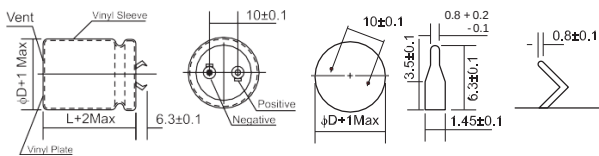
FEATURES

- ◆ Has a snap-in terminal which can solder directly to a PCB
- ◆ Suitable for electronic equipment with medium-high voltage circuits
- ◆ Printed circuit board terminal snap-in type and lug terminal type available

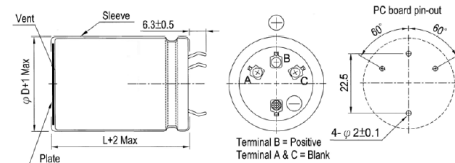
SPECIFICATIONS

Items	Performance																	
Operating Temperature Range	-40 °C ~ +85 °C																	
Capacitance Tolerance	±20% (at 120Hz, 20 °C)																	
Leakage Current (at 20 °C)	I = 0.02CV or 1.5 mA whichever is smaller (after 5 minutes) Where, C= rated capacitance in μF,V= rated DC working voltage in V.																	
Dissipation Factor (Tanδ at 120Hz, 20°C)	Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500		
	Tanδ (max)	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15		
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.																	
	Rated Voltage		16	25	35	50	63	100	160	200	250	350	400	420	450	500		
	Impedance Ratio	Z (-25 °C)/Z(+20 °C)	4	3	3	2	2	4	4	4	4	8	8	8	8	8		
		Z(-40 °C)/Z(+20 °C)	15	10	8	6	5	4	8	10	10	16	18	18	20	20		
Load Life Test	Test Time		3,000 Hrs					* The specifications shall be satisfied when the capacitors are restored to 20 °C after the rated voltage applied for 3,000 hrs at 85 °C										
	Capacitance Change		≤ ± 20%															
	Dissipation Factor		Less than 200% of specified value															
	Leakage Current		Within specified value															
Shelf Life Test	Test Time		1,000 Hrs					* The specification shall be staisfied when the capacitors are restored to 20 °C after exposing them for 1,000 hrs at 85 °C										
	Capacitance Change		≤ ± 20%															
	Dissipation Factor		Less than 200% of specified value															
	Leakage Current		Within specified value															
Ripple Current & Frequency Multipliers	Freq. (Hz) W. V. (V)	60	120	500	1k	10k up												
		Under 100	0.92	1.0	1.13	1.19												1.20
		160 and Up	0.81	1.0	1.32	1.45												1.50
		350 and Up	0.77	1.0	1.30	1.41												1.43
Ripple Current & Temperature Multipliers	Temperature (°C)	40	55	70	85													
	Multiplier	2.1	1.8	1.5	1.0													
Other Standards	Satisfies Characteristic W fo JIS C 5141																	

SNAP-IN TERMINAL TYPE (2 TERMINAL)

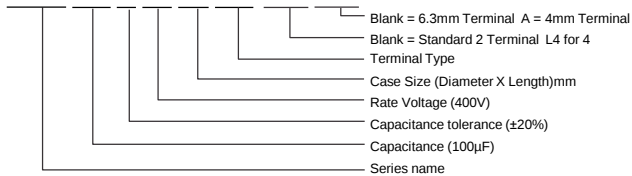


SNAP-IN TERMINAL (4 TERMINAL)



PART NUMBER EXAMPLE

CAIA 107 M 2G 220 300





CAIA SERIES: Snap-In Terminal Types

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: ΦDxL (mm); Ripple Current: A/RMS at 120Hz, 85°C

WV μF DxL	16V(1C)								25V(1E)							
	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ
5,600									22 x 25	2.31						
6,800									22 x 25	2.38	25 x 25	2.78				
									22 x 30	2.56						
8,200	22 x 25	2.56							22 x 25	2.43	25 x 25	2.78				
									22 x 35	2.81						
10,000	22 x 25	2.6	25 x 25	2.81					22 x 30	2.97	25 x 25	2.93	30 x 25	3.21		
	22 x 30	2.81	25 x 30	3.03					22 x 35	3.18	25 x 30	3.16				
12,000	22 x 25	2.88	25 x 25	2.96					22 x 35	3.33	25 x 30	3.24	30 x 25	3.59	35 x 25	3.58
	22 x 30	3.13							22 x 40	3.53	25 x 35	3.48	30 x 30	3.86		
15,000	22 x 30	3.45	25 x 25	3.38	30 x 25	3.73			22 x 40	3.68	25 x 35	3.77	30 x 25	3.60	35 x 25	3.96
	22 x 35	3.69	25 x 30	3.64					22 x 50	4.08	25 x 40	4.00	30 x 35	4.12		
18,000	22 x 30	3.47	25 x 25	3.47					22 x 50	4.54	25 x 40	4.42	30 x 30	4.40	35 x 25	4.34
	22 x 40	3.98	25 x 35	3.98							25 x 45	4.68	30 x 35	4.66	35 x 30	4.68
22,000	22 x 35	3.84	25 x 30	3.93	30 x 25	4.08	35 x 25	4.15			25 x 45	4.71	30 x 35	4.70	35 x 25	4.60
	22 x 50	4.52	25 x 40	4.44	30 x 30	4.38							30 x 45	5.26	35 x 35	5.20
27,000	22 x 50	4.84														
33,000	22 x 50	5.2														

WV μF DxL	35V(1V)								50V(1H)							
	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ	22Φ	25Φ	30Φ	35Φ
2,200									22 x 25	1.93						
2,700									22 x 25	2.05						
									22 x 30	2.21						
3,300									22 x 30	2.41	25 x 25	2.38				
3,900									22 x 30	2.51	25 x 25	2.46				
									22 x 35	2.72	25 x 30	2.68				
4,700	22 x 25	2.21	25 x 25	2.42					22 x 35	2.83	25 x 30	3.03	30 x 25	3.01		
	22 x 30	2.41							22 x 40	3.01						
5,600	22 x 30	2.69	25 x 25	2.69					22 x 40	3.21	25 x 35	3.37	30 x 25	3.17	35 x 25	3.47
	22 x 35	2.79							22 x 45	3.43			30 x 30	3.43		
6,800	22 x 35	2.70	25 x 25	2.67	30 x 25	3.09			22 x 45	3.73	25 x 35	3.59	30 x 30	3.56	35 x 25	3.64
	22 x 40	2.89	25 x 30	2.89					22 x 50	3.94	25 x 40	3.87	30 x 35	3.87		
8,200	22 x 35	3.09	25 x 30	3.12	30 x 25	3.04					25 x 40	4.10	30 x 30	4.12	35 x 25	4.07
	22 x 45	3.47	25 x 35	3.33	30 x 30	3.29					25 x 45	4.37	30 x 35	4.42	35 x 30	4.41
10,000	22 x 40	3.22	25 x 35	3.37	30 x 25	3.36	35 x 25	3.32			25 x 50	4.91	30 x 35	4.68	35 x 30	4.59
	22 x 50	3.59	25 x 40	3.59	30 x 30	3.61							30 x 40	5.02	35 x 35	4.92
12,000	22 x 45	3.71	25 x 40	3.79	30 x 30	3.74	35 x 25	3.75					30 x 40	5.10	35 x 35	5.30
			25 x 45	4.01	30 x 35	4.01	35 x 30	4.02					30 x 50	5.60	35 x 40	5.60
15,000			25 x 45	4.55	30 x 35	4.54	35 x 25	4.37							35 x 40	6.03
					30 x 40	4.80	35 x 35	5.01							35 x 45	6.44
18,000			25 x 50	4.84	30 x 40	4.87	35 x 30	5.03								
					30 x 45	5.18	35 x 40	5.71								
22,000					30 x 45	5.79	35 x 35	5.71								
							35 x 45	6.38								



CAIA SERIES: Snap-In Terminal Types

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: ΦDxL (mm); Ripple Current: A/RMS at 120Hz, 85°C

WV μF DxL	35V(1V)								50V(1H)							
	22Φ		25Φ		30Φ		35Φ		22Φ		25Φ		30Φ		35Φ	
2,200									22 x 25	1.93						
2,700									22 x 25	2.05						
									22 x 30	2.21						
3,300									22 x 30	2.41	25 x 25	2.38				
3,900									22 x 30	2.51	25 x 25	2.46				
									22 x 35	2.72	25 x 30	2.68				
4,700	22 x 25	2.21	25 x 25	2.42					22 x 35	2.83	25 x 30	3.03	30 x 25	3.01		
	22 x 30	2.41							22 x 40	3.01						
5,600	22 x 30	2.69	25 x 25	2.69					22 x 40	3.21	25 x 35	3.37	30 x 25	3.17	35 x 25	3.47
	22 x 35	2.79							22 x 45	3.43			30 x 30	3.43		
6,800	22 x 35	2.70	25 x 25	2.67	30 x 25	3.09			22 x 45	3.73	25 x 35	3.59	30 x 30	3.56	35 x 25	3.64
	22 x 40	2.89	25 x 30	2.89					22 x 50	3.94	25 x 40	3.87	30 x 35	3.87		
8,200	22 x 35	3.09	25 x 30	3.12	30 x 25	3.04					25 x 40	4.10	30 x 30	4.12	35 x 25	4.07
	22 x 45	3.47	25 x 35	3.33	30 x 30	3.29					25 x 45	4.37	30 x 35	4.42	35 x 30	4.41
10,000	22 x 40	3.22	25 x 35	3.37	30 x 25	3.36	35 x 25	3.32			25 x 50	4.91	30 x 35	4.68	35 x 30	4.59
	22 x 50	3.59	25 x 40	3.59	30 x 30	3.61							30 x 40	5.02	35 x 35	4.92
12,000	22 x 45	3.71	25 x 40	3.79	30 x 30	3.74	35 x 25	3.75					30 x 40	5.10	35 x 35	5.30
			25 x 45	4.01	30 x 35	4.01	35 x 30	4.02					30 x 50	5.60	35 x 40	5.60
15,000			25 x 45	4.55	30 x 35	4.54	35 x 25	4.37							35 x 40	6.03
					30 x 40	4.80	35 x 35	5.01							35 x 45	6.44
18,000			25 x 50	4.84	30 x 40	4.87	35 x 30	5.03								
					30 x 45	5.18	35 x 40	5.71								
22,000					30 x 45	5.79	35 x 35	5.71								
							35 x 45	6.38								

WV μF DxL	63V(1J)								100V(2A)							
	22Φ		25Φ		30Φ		35Φ		22Φ		25Φ		30Φ		35Φ	
1,200									22 x 30	2.12	25 x 25					
1,500									22 x 35	2.45	25 x 30		30 x 25	2.46		
1,800	22 x 25	1.90							22 x 40	2.77	25 x 35		30 x 25	2.65		
2,200	22 x 30	2.35	25 x 25	2.30					22 x 45	3.12	25 x 40		30 x 30	3.10	35 x 25	3.14
2,700	22 x 35	2.50	25 x 25	2.29							25 x 45		30 x 35	3.60	35 x 30	3.71
	22 x 30		25 x 30	2.52												
3,300	22 x 35	2.62	25 x 30	2.69	30 x 25	2.78					25 x 50		30 x 40	4.05	35 x 35	4.07
3,900	22 x 40	2.90	25 x 35	3.09	30 x 30	3.09							30 x 45	4.60	35 x 35	4.50
	22 x 45	3.10														
4,700	22 x 50	3.49	25 x 40	3.37	30 x 30	3.37	35 x 25	3.36					30 x 50	5.13	35 x 40	5.12
5,600			25 x 45	3.77	30 x 35	3.75	35 x 30	3.88							35 x 45	5.75
6,800			25 x 50	4.41	30 x 40	4.41	35 x 30	4.04							35 x 50	6.01
						4.90	35 x 35	4.33								
8,200					30 x 45	5.49	35 x 35	4.80								
10,000					30 x 50		35 x 40	5.47								
12,000							35 x 45	5.97								
							35 x 50	6.30								



CAIA SERIES: Snap-In Terminal Types

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: ΦDxL (mm); Ripple Current: A/RMS at 120Hz, 85°C

WV μF	DxL	160V(2C)								200V(2D)							
		22Φ		25Φ		30Φ		35Φ		22Φ		25Φ		30Φ		35Φ	
150	22 x 25	0.95								22 x 25	0.95						
180	22 x 25	1.04								22 x 25	1.04						
220	22 x 25	1.15								22 x 25	1.15						
270	20 x 25	1.12															
	22 x 25	1.27								22 x 25	1.30						
330	20 x 30	1.28								22 x 30	1.40	25 x 25	1.43				
	22 x 25	1.4															
390	22 x 30	1.62								22 x 30	1.65	25 x 25	1.63				
										22 x 35	1.76	25 x 30	1.74				
470	22 x 30	1.77	25 x 25	1.77						22 x 35	1.88	25 x 30	1.86	30 x 25	1.85		
										22 x 40	1.97						
560	22 x 30	1.92	25 x 25	1.92	30 x 25	2.02				22 x 40	2.08	25 x 30	2.05	30 x 25	2.05		
	22 x 35	2.05	25 x 30	2.05						22 x 45	2.18	25 x 35	2.16	30 x 30	2.15		
680	22 x 35	2.12	25 x 30	2.22	30 x 25	2.22				22 x 45	2.36	25 x 35	2.36	30 x 30	2.36	35 x 25	2.10
	22 x 40	2.24	25 x 35	2.31						22 x 50	2.47	25 x 40	2.43	30 x 35	2.43		
820	22 x 40	2.32	25 x 30	2.32	30 x 25	2.31	35 x 25	2.50		22 x 50	2.68	25 x 40	2.66	30 x 30	2.62	35 x 30	2.72
	22 x 45	2.55	25 x 35	2.52	30 x 30	2.51						25 x 45	2.79	30 x 35	2.77	35 x 25	2.39
1,000	22 x 50	2.88	25 x 40	2.86	30 x 30	2.82	35 x 25	2.79				25 x 45	2.96	30 x 35	3.00	35 x 30	2.96
			25 x 45	2.98	30 x 35	2.94	35 x 30	2.92				25 x 50	3.12	30 x 40	3.10	35 x 35	3.09
1,200			25 x 45	3.27	30 x 35	3.25	35 x 30	3.24				25 x 50	3.44	30 x 40	3.44	35 x 35	3.40
			25 x 50	3.43	30 x 40	3.42	35 x 35	3.40						30 x 45	3.53	35 x 40	3.50
1,500					30 x 40	3.77	35 x 35	3.75						30 x 50	3.93	35 x 40	3.87
					30 x 45	3.92	35 x 40	3.90								35 x 45	3.95
1,800					30 x 45	4.10	35 x 35	4.08								35 x 45	4.37
					30 x 50	4.32	35 x 40	4.30								35 x 50	4.45
2,200							35 x 45	4.72								35 x 50	5.00
							35 x 50	4.88									

WV μF	DxL	250V(2E)								350V(2V)							
		22Φ		25Φ		30Φ		35Φ		22Φ		25Φ		30Φ		35Φ	
82										22 x 25	0.81						
100										22 x 25	0.90						
120										20 x 30	0.95	25 x 25	1.04				
										22 x 25	0.99						
150										22 x 30	1.05						
										20 x 35	1.05	25 x 25	1.16	30 x 25	1.24		
180	22 x 25	0.91								22 x 30	1.14						
										22 x 35	1.24	25 x 30	1.24				
220	22 x 25	1.01								20 x 40	1.23	25 x 30	1.30	30 x 25	1.37		
										22 x 35	1.28						
270	22 x 25	1.18	25 x 25	1.24						22 x 40	1.38	25 x 35	1.37				
										20 x 45	1.36	25 x 35	1.46	30 x 25	1.47		
330	22 x 30	1.27								22 x 40	1.40						
	22 x 30	1.43	25 x 25	1.49						22 x 45	1.49	25 x 40	1.51	30 x 30	1.52		
390	22 x 35	1.52								22 x 45	1.62	25 x 35	1.65	30 x 30	1.71	35 x 25	1.72
	22 x 30	1.58	25 x 25	1.53	30 x 25	1.59				22 x 50	1.69	25 x 40	1.73	30 x 35	1.76		
470	22 x 35	1.67	25 x 30	1.62						22 x 50	1.94	25 x 40	1.88	30 x 35	1.93	35 x 25	1.77
	22 x 35	1.79	25 x 30	1.79	30 x 25	1.77						25 x 45	1.96	30 x 40	1.98	35 x 30	1.96
560	22 x 40	1.89	25 x 35	1.87	30 x 30	1.85								30 x 40	2.18	35 x 35	2.24
	22 x 40	2.05	25 x 35	2.05	30 x 25	1.80								30 x 40	2.41	35 x 35	2.43
680	22 x 45	2.14			30 x 30	2.03								30 x 45	2.48	35 x 40	2.50
	22 x 50	2.43	25 x 40	2.32	30 x 30	2.24	35 x 25	2.21						30 x 45	2.60	35 x 35	2.62
820			25 x 45	2.41	30 x 35	2.32	35 x 30	2.30								35 x 40	2.69
			25 x 45	2.62	30 x 35	2.58	35 x 30	2.54								35 x 40	2.80
1,000			25 x 50	2.70	30 x 40	2.65	35 x 35	2.62								35 x 45	3.08
					30 x 40	2.92	35 x 35	2.90									
1,200					30 x 45	3.00	35 x 40	2.98									
					30 x 45	3.11	35 x 35	3.06									
1,500					30 x 50	3.47	35 x 40	3.39									
							35 x 45	3.45									
1,800							35 x 40	3.39									
							35 x 45	3.74									
2,200							35 x 50	3.81									



CAIA SERIES: Snap-In Terminal Types

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: ΦDxL (mm); Ripple Current: A/RMS at 120Hz, 85°C

WV μF	DxL	400V(2G)								450V(2W)							
		22Φ		25Φ		30Φ		35Φ		22Φ		25Φ		30Φ		35Φ	
56										20 x 25	0.57						
										22 x 25	0.68						
68	20 x 25	0.66								20 x 25	0.62						
	22 x 25	0.72								22 x 25	0.72						
82										22 x 30	0.80						
	20 x 25	0.72								20 x 30	0.74	25 x 25	0.85				
100	22 x 25	0.80								22 x 30	0.87						
	22 x 25	0.81								20 x 35	0.87	25 x 25	0.98				
120	22 x 30	0.94	25 x 25	0.97						22 x 30	0.87						
										22 x 35	1.00						
150	22 x 30	1.04	25 x 25	1.08						20 x 40	0.96	25 x 30	1.09	30 x 25	1.10		
	22 x 35	1.12	25 x 30	1.16						22 x 35	1.05						
180										22 x 40	1.15	25 x 35	1.12				
	20 x 35	1.00	25 x 30	1.21						20 x 45	1.13	25 x 30	1.16	30 x 25	1.16		
220	22 x 35	1.18			30 x 25	1.24				22 x 35	1.20	25 x 35	1.27	30 x 30	1.32		
	22 x 40	1.25								22 x 40	1.25	25 x 40	1.35				
270	20 x 40	1.17	25 x 30	1.23	30 x 25	1.45				20 x 50	1.29	25 x 35	1.31			35 x 25	1.35
	22 x 40	1.34	25 x 35	1.37	30 x 30	1.52	35 x 25	1.54		22 x 45	1.36	25 x 40	1.45	30 x 30	1.43	35 x 30	1.49
330	22 x 45	1.40								22 x 50	1.51	25 x 45	1.50	30 x 35	1.49		
	20 x 50	1.43	25 x 35	1.56	30 x 30	1.58	35 x 25	1.6				25 x 40	1.47	30 x 30	1.45	35 x 25	1.43
390	22 x 50	1.56	25 x 40	1.62	30 x 35	1.64						25 x 45	1.65	30 x 35	1.63	35 x 30	1.61
	22 x 50	1.56										25 x 50	1.73	30 x 40	1.72		
470	22 x 50	1.74	25 x 40	1.70	30 x 30	1.56	35 x 25	1.53				25 x 45	1.59	30 x 35	1.65	35 x 30	1.71
			25 x 45	1.76	30 x 35	1.73	35 x 30	1.75				25 x 50	1.72	30 x 40	1.83	35 x 35	1.86
560					30 x 40	1.79								30 x 45	1.95		
			25 x 45	1.76	30 x 35	1.76	35 x 30	1.95				25 x 50	1.76	30 x 40	1.93	35 x 30	1.88
680			25 x 50	1.90	30 x 40	1.97	35 x 35	2.02						30 x 45	2.10	35 x 35	2.06
					30 x 45	2.02								30 x 50	2.19	35 x 40	2.13
820			25 x 50	1.95	30 x 40	2.15	35 x 30	1.97						30 x 45	2.03	35 x 35	2.00
					30 x 45	2.22	35 x 35	2.17						30 x 50	2.24	35 x 40	2.11
1000							35 x 40	2.24								35 x 45	2.34
					30 x 45	2.23	35 x 35	2.20						30 x 50	2.33	35 x 45	2.43
1200					30 x 50	2.40	35 x 40	2.42								35 x 50	2.63
							35 x 45	2.48									
1500					30 x 50	2.44	35 x 40	2.49								35 x 45	2.60
							35 x 45	2.71									
1800							35 x 50	2.78									
							35 x 45	2.68								35 x 50	2.91
2200							35 x 50	2.95									

WV μF	DxL	500V(2H)							
		22Φ		25Φ		30Φ		35Φ	
56	22 x 25	0.70							
68	22 x 30	0.82							
82	22 x 35	0.96	25 30	0.97					
100	22 x 40	1.14	25 35	1.15	30 x 30	1.16			
120	22 x 45	1.30	25 35	1.25	30 x 30	1.26	35 x 25	1.20	
150	22 x 50	1.52	25 40	1.48	30 x 35	1.50	35 x 30	1.34	
180			25 50	1.65	30 x 40	1.60	35 x 30	1.55	
220					30 x 45	1.90	35 x 30	1.85	
270							35 x 40	1.95	
330							35 x 45	2.00	



CAIA SERIES: Snap-In Terminal Types

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: $\Phi D \times L$ (mm); Ripple Current: A/RMS at 120Hz, 85°C

Items below available only in 4 Terminal Types (L4)

$\frac{WV}{\mu F}$ D $\times$ L	160V(2C)				200V(2D)				250V(2E)			
	35 ϕ		40 ϕ		35 ϕ		40 ϕ		35 ϕ		40 ϕ	
1,500											40 x 40	4.04
1,800									35 x 70	4.60	40 x 50	4.5
2,200							40 x 40	4.92	35 x 80	4.90	40 x 60	4.90
2,700					35 x 70	5.40	40 x 50	5.00	35 x 90	5.40	40 x 80	6.30
3,300	35 x 70	4.80	40 x 60	5.00	35 x 80	5.90	40 x 60	5.90	35 x 90	6.10	40 x 80	7.00
3,900	35 x 80	5.40	40 x 70	5.60	35 x 80	6.30	40 x 80	6.40	35 x 100	7.47	40 x 90	8.00
4,700			40 x 80	6.60	35 x 90	7.10	40 x 80	7.38			40 x 100	8.88
5,600					35 x 100	8.90	40 x 90	8.00				
6,800							40 x 100	8.65				

$\frac{WV}{\mu F}$ D $\times$ L	400V(2G)				420V(2P)				450V(2W)			
	35 ϕ		40 ϕ		35 ϕ		40 ϕ		35 ϕ		40 ϕ	
680	35 x 60	3.70	40 x 50	3.7	35 x 60	3.7	40 x 50	3.7	35 x 70	4.0	40 x 50	3.7
820	35 x 60	4.10	40 x 50	4.0	35 x 70	4.4	40 x 60	4.3	35 x 80	4.6	40 x 60	4.3
1,000	35 x 70	4.80	40 x 60	4.8	35 x 80	5.1	40 x 60	4.8	35 x 100	5.6	40 x 70	5.1
1,200	35 x 100	6.10	40 x 70	5.5			40 x 70	5.5			40 x 80	5.8
1,500	35 x 100	6.80	40 x 80	6.5			40 x 100	7.2			40 x 100	7.2
1,800			40 x 100	7.8			40 x 100	7.8				