

## FEATURES

- Load life of 2,000 hours application of ripple current at 85°C.
- Higher ripple current than WR series, high reliability type.
- Inverter-use.



## SPECIFICATIONS

Item	Performance Characteristics			
Operating Temperature Range	-25 to +85°C			
Rated Working Voltage Range	350 to 450V			
Nominal Capacitance Range	390 to 22000μF			
Capacitance Tolerance	±20% at 120Hz, +20°C			
Leakage Current	$I \leq 0.02CV$ (μA) or 5 (mA) whichever is smaller measured after 5 minutes application of rated working voltage at +20°C			
tan δ (120Hz, +20°C)	0.25			
Low Temperature Characteristics	Impedance ratio max. at 120Hz			
	<table border="1"> <tr> <td>Working Voltage (V)</td> <td>350~450</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>8</td> </tr> </table>	Working Voltage (V)	350~450	Z-25°C / Z+20°C
Working Voltage (V)	350~450			
Z-25°C / Z+20°C	8			
High Temperature Loading	Test time : 2,000 hours Test temperature : +85°C Test conditions : Rated DC working voltage with rated ripple current			
	Post test requirements at +20°C Leakage current : ≤Initial specified value Cap. change : within ±20% of the initial measured value tan δ : ≤200% of the initial specified value			
Shelf Life	At +85°C no voltage applied after 1,000 hours and then being stabilized at +20°C the capacitors shall meet the following limits Leakage current : ≤Initial specified value Cap. change : within ±20% of the initial measured value tan δ : ≤175% of the initial specified value			
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)			

## RIPPLE CURRENT MULTIPLIER

### Frequency Coefficient

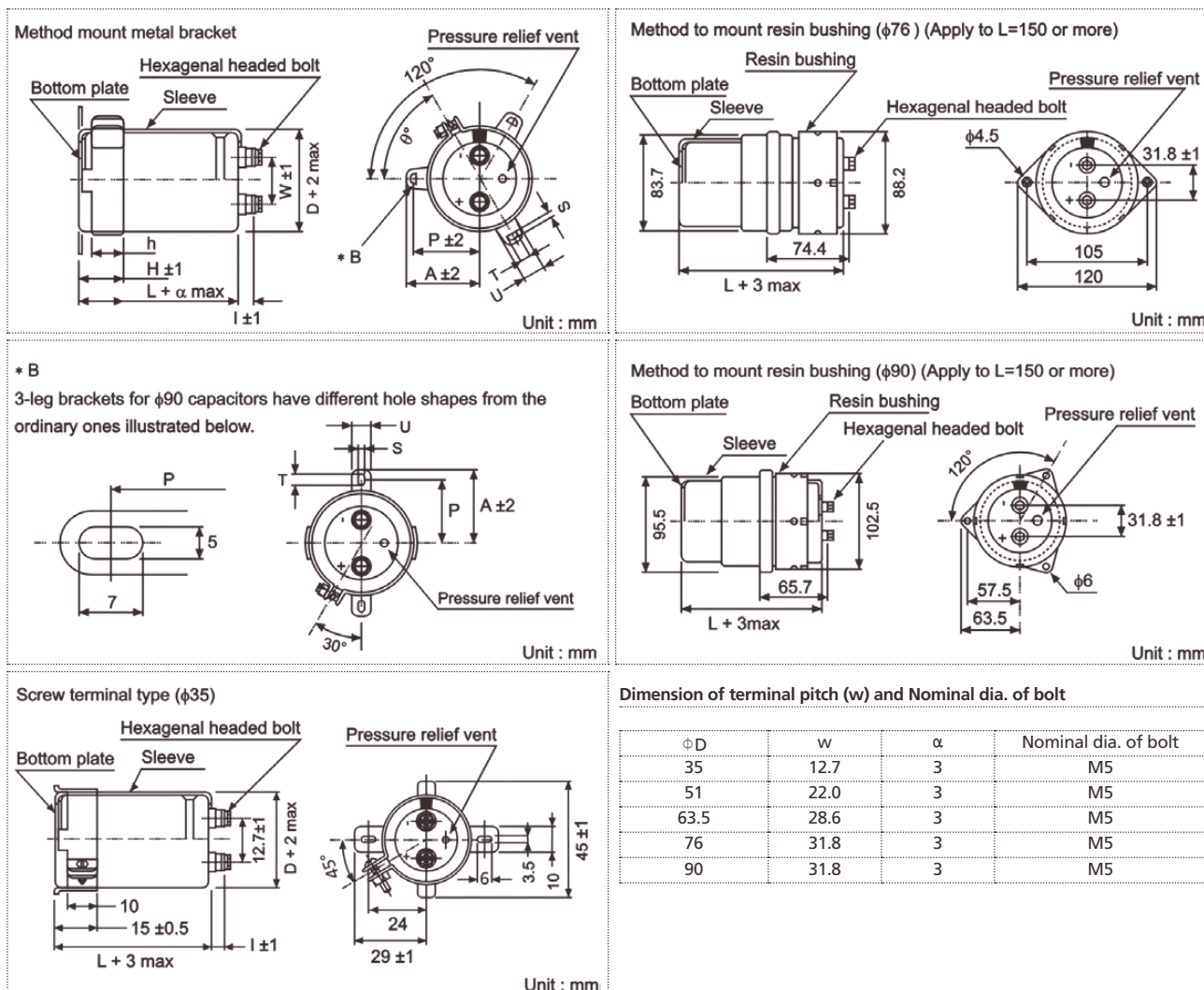
Coefficient	Freq. (Hz)				
	50	120	300	1k	10k~
Rated Voltage <160V	0.80	1.00	1.08	1.15	1.15
Rated Voltage ≥160V	0.80	1.00	1.08	1.15	1.20

## PART NUMBER SYSTEM (EXAMPLE : 350V 2200μF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	WI	228	M	2V	S	95	O5

Type (Terminal Code)  
 Case Length (95mm)  
 Diameter (51mm)  
 Voltage (350V)  
 Tolerance (±20%)  
 Capacitance (2200μF)  
 Series  
 E-CAP

## CASE SIZE TABLE



## Dimensions of mounting bracket

Voltage (Code)		3-Leg				2-Leg				
Symbol	φD	51	63.5	76	90	35	51	63.5	76	90
P		32.5	38.1	44.5	50.8	24	33.2	40.5	46.5	53
A		38.5	43	49.2	58.5	29	40	46.5	53	59
T		7.5	8.0	7.0	8.0	6.0	6.0	7.0	6.0	6.0
S		5.0	5.0	5.0	5.0	3.5	4.5	4.5	4.5	4.5
U		12	14	14	18	10	14	14	14	14
θ°		60	60	60	60	30	30	30	30	30
H		20	25	30	35	15	25	35	35	35
h		15	20	24	25	10	15	20	20	20

**STANDARD RATINGS**

Voltage (Code)		350V (2V)		400V (2G)		450V (2W)	
SV		400		450		500	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
390	397	35 x 50	1.9				
560	567			35 x 80	2.8		
680	687	35 x 80	3.1				
820	827			35 x 100	3.8		
1000	108	35 x 100	4.2	35 x 120	4.5	51 x 75	5.4
1200	128	35 x 120	4.8	51 x 75	4.9	51 x 95	6.6
1500	158	51 x 75	5.3			51 x 115	7.6
1800	188			51 x 95	6.4	51 x 130	8.3
2200	228	51 x 95	7.1	51 x 130	8.1	63.5 x 95	10.0
2700	278			63.5 x 96	8.9	63.5 x 115	11.7
3300	338	51 x 130	10.0	63.5 x 115	11.3	63.5 x 130	12.0
3900	398	63.5 x 115	11.7	63.5 x 130	12.3	76 x 115	13.3
4700	478	63.5 x 130	13.5	76 x 106	13.8	76 x 130	15.4
				76 x 115	14.3		
5600	568	76 x 115	15.5	76 x 130	16.5	76 x 155	18.2
6800	688	76 x 130	17.9	76 x 144	19.0	90 x 155	20.6
				76 x 155	19.6		
8200	828	76 x 155	20.4	90 x 155	22.0	90 x 155	22.1
10000	109	90 x 130	21.7	90 x 155	23.6	90 x 195	27.2
12000	129	90 x 155	24.7	90 x 195	27.5	90 x 235	32.1
15000	159	90 x 195	28.6	90 x 235	32.1		
18000	189	90 x 235	34.1				
22000	229			90 x 235	38.9		

Maximum Allowable Ripple Current (Arms) at 85°C 120Hz

Case Size  $\Phi$ D x L (mm)