

## FEATURES

- Load life of 10,000 hours application of ripple current at 85°C.
- High ripple, high reliability.
- Best for use in industrial power supplies for inverter circuitry.



## SPECIFICATIONS

Item	Performance Characteristics										
Operating Temperature Range	-25 to +85°C										
Rated Working Voltage Range	350 to 500V										
Nominal Capacitance Range	470 to 22000µF										
Capacitance Tolerance	±20% at 120Hz, +20°C										
Leakage Current	I ≤ 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)	Working Voltage (V) 350~500										
	tan δ (max.) 0.2										
Low Temperature Characteristics	Impedance ratio max. at 120Hz										
	Working Voltage (V) 350~500 Z-25°C / Z+20°C 8										
High Temperature Loading	<table border="0"> <tr> <td>Test time : 10,000 hours</td> <td>Post test requirements at +20°C</td> </tr> <tr> <td>Test temperature : +85°C</td> <td>Leakage current : ≤ Initial specified value</td> </tr> <tr> <td>Test conditions : Rated DC working voltage with rated ripple current</td> <td>Cap. change : within ±20% of the initial measured value</td> </tr> <tr> <td></td> <td>tan δ : value</td> </tr> <tr> <td></td> <td>≤ 300% of the initial specified value</td> </tr> </table>	Test time : 10,000 hours	Post test requirements at +20°C	Test temperature : +85°C	Leakage current : ≤ Initial specified value	Test conditions : Rated DC working voltage with rated ripple current	Cap. change : within ±20% of the initial measured value		tan δ : value		≤ 300% of the initial specified value
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	tan δ : value										
	≤ 300% 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 : ≤ 300% of the initial specified value										
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)										

## RIPPLE CURRENT MULTIPLIER

### Frequency Coefficient

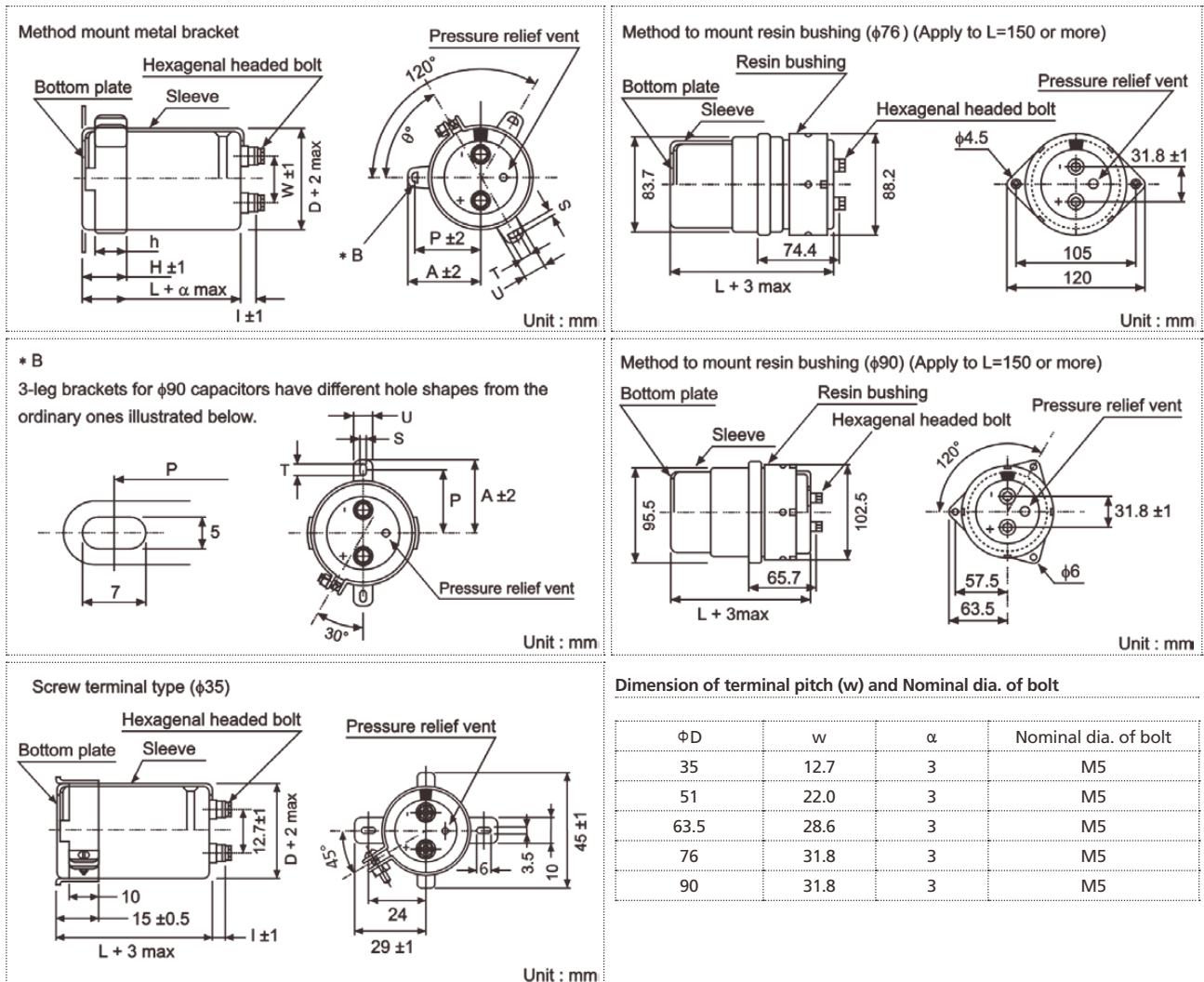
Coefficient Rated Voltage	Freq. (Hz)					
	50	120	300	1k	10k~	
<160V	0.80	1.00	1.08	1.15	1.15	
≥160V	0.80	1.00	1.08	1.15	1.20	

## PART NUMBER SYSTEM (EXAMPLE : 400V 3300µF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	WH	338	M	2G	U	90	OO

Type (Terminal Code)  
 Case Length (90mm)  
 Diameter (76.2mm)  
 Voltage (400V)  
 Tolerance (±20%)  
 Capacitance (3300µF)  
 Series  
 E-CAP

## CASE SIZE TABLE



## Dimensions of mounting bracket

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

**STANDARD RATINGS**

Voltage (Code)		350V (2V)		400V (2G)		450V (2W)		500V (2H)	
SV		400		450		500		550	
Cap. (µF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
470	477							51 x 80	2.4
560	567					51 x 80	2.6		
680	687			51 x 80	3.0				
820	827	51 x 80	3.3					51 x 90	3.6
1000	108					51 x 90	4.0	51 x 110	4.4
1200	128			51 x 90	4.7	51 x 110	4.8	51 x 130	5.2
1500	158	51 x 90	5.2					63.5 x 90	5.0
1800	188			51 x 110	6.3	51 x 130	6.4	63.5 x 110	6.8
						63.5 x 90	6.2		
2200	228	51 x 110	7.0	51 x 130	7.5	51 x 150	7.6		
				63.5 x 90	7.3	63.5 x 110	7.5		
2700	278	51 x 130	8.4	51 x 150	8.9	63.5 x 130	8.9	63.5 x 150	9.6
		63.5 x 90	8.1	63.5 x 110	8.8	76 x 90	8.4	76 x 110	9.2
3300	338	51 x 150	9.9	63.5 x 130	10.5	63.5 x 150	10.6		
				76 x 90	9.9	76 x 110	10.2		
3900	398	63.5 x 130	11.5					76 x 150	12.7
		76 x 90	10.8			76 x 130	11.9	90 x 130	11.9
4700	478			63.5 x 150	13.4	76 x 115	12.4		
				76 x 130	13.9	76 x 150	14.0		
5600	568	63.5 x 150	14.7			90 x 130	14.2		
6800	688	76 x 130	16.8	76 x 150	17.9	76 x 190	17.3	90 x 190	18.8
				90 x 130	17.2	90 x 150	16.7		
8200	828	76 x 150	19.6	76 x 190	20.8				
				90 x 150	20.1				
10000	109	76 x 190	23.0			90 x 190	22.8	90 x 270	26.8
12000	129			90 x 190	27.4				
15000	159	90 x 190	30.6			90 x 270	32.8		
22000	229	90 x 270	43.5	90 x 270	39.4				

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

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

Specifications are subject to change without notice. Should a safety or technical concern arise regarding the product, please be sure to contact our sales offices or agents immediately.