

- **High-temperature 130℃, high reliability.**
- **Load life 1,000~4,000 hours at 130℃.**
- **For automotive electronics and lighting equipment and other high temperature applications.**

[illegible]

Technical drawing of a sleeve assembly. The drawing includes a side view and a top view. The side view shows a sleeve with a diameter ϕD and a length $L+a$ Max. The sleeve is connected to a pipe with a diameter $\phi d \pm 0.05$. The sleeve has a safety vent with a diameter $\phi 6.3$. The sleeve is labeled "Sleeve". The dimensions $15min.$ and $5min.$ are indicated. The top view shows a circular cross-section with a diameter $P \pm 0.5$.

ΦD	5	6.3	8	10	12.5/13	16	18
ΦD	ΦD ±0.5 Max						
Φd	0.5	0.5	0.5/0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
a	$< 20 L \pm 1.5 \text{Max}$ $\geq 20 L \pm 2.0 \text{Max}$						

E	H	H	0	1	6	M	1	0	2	G	2	0	L	O	5	0	A	A
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Special Request

Lead size

Lead type

Height code (L: 20mm)

Diameter code (G: $\Phi 10$)

Capacitance code (1000 μ F)

Capacitance tolerance code (M: $\pm 20\%$)

Voltage code (16V)

Series code (HH)

Category code

HH Series

◆ Case size & Permissible rated ripple current: (mA rms) at 130°C / 100KHz

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @130°C/100kHz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @130°C/100kHz (mA rms)
10	220	8×12	380	16	220	8×12	370
	330	8×12	480		330	8×12	400
	470	10×13	660		470	8×12	490
	1000	10×20	1170		1000	10×13	830
	2200	13×25	1700		1500	8×20	1030
	3300	13×25	1900		2200	10×20	1120
	4700	16×26	2100		3300	13×25	1800
25	47	6.3×11	140	35	100	6.3×12	180
	100	6.3×11	200		220	8×12	380
	220	8×12	360		330	10×16	800
	330	8×12	380		470	10×20	930
	470	10×13	610		1000	13×25	1250
	1000	13×20	1250		1500	13×30	1900
	2200	16×20	1700		2200	18×35	2850
50	3300	16×32	2300		3300	18×40	3000
	4.7	5×11	50	63	10	5×11	70
	10	5×11	100		22	6.3×11	120
	22	5×11	120		33	6.3×11	150
	33	6.3×12	160		100	10×12	350
	47	6.3×12	200		220	10×20	650
	100	8×12	350		330	10×20	800
	220	10×16	600		470	13×20	1000
	330	10×16	730		680	13×25	1300
	470	10×17	890		1000	16×30	1880
	820	16×21	1600		1200	18×30	2050
	1000	16×21	1800				
	2200	16×35	2300				
100	3.3	5×11	40	200	4.7	6.3×12	80
	4.7	5×11	48		5.6	8×12	100
	10	5×11	70		6.8	8×12	120
		6.3×11	80		10	8×16	160
	15	6.3×12	110		15	8×16	200
	22	8×12	200		22	10×16	310
	47	8×16	250		33	10×16	320
	56	10×13	290		47	10×20	380
	68	10×16	350		120	12.5×30	690
	100	10×20	460		150	16×25	870
	180	13×20	700		180	18×25	1000
	220	13×25	880				
	390	16×30	1400				
	470	16×30	1500				

HH Series

◆ Case size & Permissible rated ripple current: (mA rms) at 130°C / 100KHz

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @130°C/100kHz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @130°C/100kHz (mA rms)
250	3.3	6.3×11	75	400	3.3	8×12	95
	4.7	8×12	110		4.7	8×12	110
	5.6	8×12	120		6.8	10×16	150
	6.8	8×16	140		10	10×20	200
	10	8×16	180		15	10×20	210
	15	8×20	220		22	13×20	300
	22	10×16	300		33	13×20	350
	33	10×25	350		68	18×25	570
	47	12.5×20	470		82	18×25	630
	56	12.5×25	500		150	18×36	880
	68	16×20	580				
	82	16×25	640				
420	3.3	8×16	90	450	3.3	8×12	60
	4.7	8×20	100		4.7	10×13	120
	5.6	10×16	110		8.2	10×12	130
	6.8	10×20	120		56	18×25	520
	10	10×25	160		68	18×26	580
	15	10×30	210		82	18×30	670
	22	12.5×25	260		100	18×35	800
	33	12.5×30	320		150	18×40	900
	47	16×32	450				

◆ RIPPLE CURRENT MULTIPLIERS
Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)				
		50/60	120	1K	10K	100K
10 ~ 100	<100	0.40	0.60	0.85	0.95	1.00
	100 ~ 470	0.50	0.65	0.90	0.98	1.00
	>470	0.60	0.70	0.95	1.00	1.00
160 ~ 450	3.3~15	/	0.30	0.60	0.90	1.00
	22~100	/	0.50	0.80	0.90	1.00