

TA Series

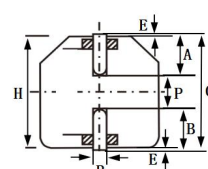
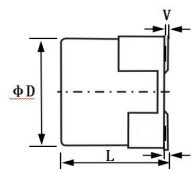
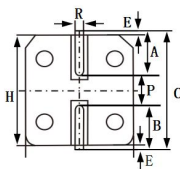
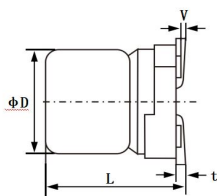
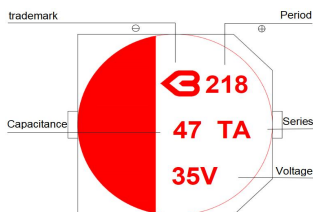
- High reliability hybrid capacitors for automotive equipment electronics
- Endurance with ripple current : 5000~10000 hours at 105°C
- High Voltage: 16~250V
- RoHS compliant
- Halogen Free
- AEC-Q200 compliant



◆ Specifications

Items	Characteristics		
Category			
Temperature Range	-55 ~ +105°C		
Rated Voltage Range	16~250V		
Capacitance tolerance	±20%(M) (at 20°C,120Hz)		
Leakage Current	I≤0.01CV or 10μA (The bigger) After 2 minutes applied for rated voltage at 20°C, less than or equal to the specified value.		
tanδ Dissipation Factor	Less than or equal to the specified (at 20°C,120Hz)		
Low Temperature Characteristics (Max.Impedance Ratio)	Z(-55°C)/Z(+20°C)	≅ 0.75 to 1.5	(100KHz)
	Z(+105°C)/Z(+20°C)	≅ 0.75 to 2.0	
Endurance	ΦD=Φ6.3=5,000hrs, ΦD≧Φ8=10,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 5,000 to 10,000 hours at 105°C. Φ6.3=5,000hrs, D≧Φ8=10,000hrs;		
	Appearance	No significant damage	
	Capacitance change	≅ ±30% of the initial value	
	D.F.(tanδ)	≅ 200% of the specified value	
	ESR	≅ 200% of the specified value	
Damp Heat (Steady State)	The specifications listed below shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90%~ 95% RH.		
	Appearance	No significant damage	
	Capacitance change	≅ ±30% of the initial value	
	D.F.(tanδ)	≅ 200% of the specified value	
	ESR	≅ 200% of the specified value	
(Surge Voltage)	Surge Voltage=Rated voltage * 1.25(V) The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35°C for 30 seconds through a protective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≅ ±30% of the initial value	
	D.F.(tanδ)	≅ 200% of the specified value	
	ESR	≅ 200% of the specified value	
Leakage current	≅ The specified value		

◆ Dimensions (mm)



(Unit:mm)

Vibration resistant structure

Size	ΦD	L	W	H	C	R	P
5.0*5.8	5.0	5.8	5.3	6.5	5.3	0.5~0.8	1.4
6.3*7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1
8*10.5	8	10.5	8.3	8.3	9	0.7~1.1	3.2
10*10.5	10	10.5	10.3	10.3	11	0.7~1.3	4.6
10*12.5	10	12.5	10.3	10.3	11	0.7~1.3	4.6

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◆ Standard Ratings

Rated voltage (V)	Rated capacitance(μ F)	Case size Φ D*L(mm)	Leakage current (μ A)	ESR($m\Omega$) at 20°C, 100 KHz	Rated ripple current (mA _{rms} /105°C/100kHz)	$\tan\delta$ (120Hz)
16	47	5*5.8	7.5	50	2000	0.16
	100	5*5.8	16.0	40	2000	0.16
	220	6.3*7.7	35.2	20	3500	0.16
	330	8*9.7	52.8	18	3800	0.16
	470	8*10.5	75.2	15	4000	0.16
25	47	6.3*5.8	11.8	50	2000	0.12
	100	6.3*5.8	25.0	30	2000	0.12
	100	6.3*7.7	25.0	30	3000	0.12
	220	6.3*7.7	55.0	25	3500	0.12
	220	8*10.5	55.0	20	3600	0.12
	330	10*10.5	82.5	20	4000	0.12
35	47	6.3*5.8	16.5	40	2000	0.12
	100	6.3*7.7	35.0	30	2800	0.12
	100	8*10.5	35.0	30	3000	0.12
	220	8*12.5	77.0	25	3600	0.12
	330	10*10.5	115.5	20	4000	0.12
	470	10*12.5	164.5	18	4500	0.12
50	10	6.3*5.8	5.0	80	1200	0.10
	22	6.3*5.8	11.0	50	2000	0.10
	47	8*10.5	23.5	30	3000	0.10
	100	8*10.5	50.0	30	3500	0.10
	220	10*10.5	110.0	20	4000	0.10
63	22	6.3*7.7	13.9	50	2000	0.08
	47	8*10.5	29.6	30	2500	0.08
	100	10*12.5	63.0	20	3000	0.08
80	47	10*10.5	37.6	35	2000	0.08
	68	10*12.5	54.4	25	2800	0.08
	100	10*12.5	80.0	25	3200	0.08
100	22	8*12.5	22.0	40	2200	0.08
	33	10*10.5	33.0	40	2400	0.08
	47	10*12.5	47.0	35	2800	0.08
160	10	10*10.5	16.0	100	1800	0.08
250	6.8	10*12.5	17.0	480	1000	0.08

◆ Rated Ripple Current Coefficient

Frequency(Hz)	100Hz \leq f<1kHz	1kHz \leq f<10kHz	10kHz \leq f<100kHz	100kHz \leq f
4.7<C \leq 33	0.05	0.32	0.67	1.00
33<C	0.10	0.35	0.70	1.00