

# YC\* Series

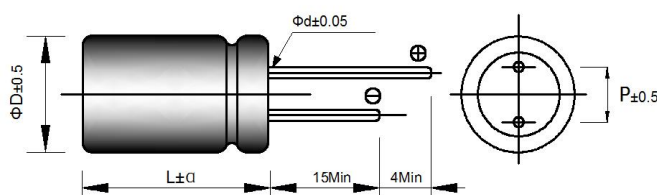
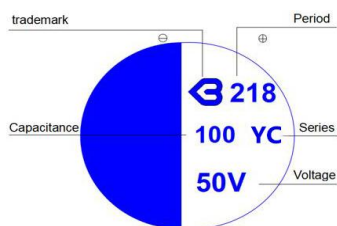
- High reliability hybrid capacitors for automotive equipment electronics
- Endurance with ripple current : 2000~4000 hours at 135°C
- High Voltage: 16~250V
- RoHS compliant
- Halogen Free
- AEC-Q200 compliant



## ◆ Specifications

Items	Characteristics		
Category Temperature Range	-55 ~ +135°C		
Rated Voltage Range	25~63V		
Capacitance tolerance	±20%(M) (at 20°C,120Hz)		
Leakage Current	I ≤ 0.01CV or 10μA (The larger) 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(+135°C)/Z(+20°C)	≅ 0.75 to 2.0	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 4,000 hours at 135°C.		
	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	
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	
	Leakage current	≅ 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)

Coated Case	10*12.5	10*16.5
ΦD	10	10
L	L±1.5Max	
Φd	0.6	0.6
p	5.0	5.0

## YC\* Series

### ◆ Standard Ratings

Rated voltage (V)	Rated capacitance( $\mu$ F)	Case size $\Phi$ D*L(mm)	Leakage current ( $\mu$ A)	ESR(m $\Omega$ ) at 20°C, 100 KHz	Rated ripple current (mA <sub>rms</sub> /135°C/100kHz)	tan $\delta$ (120Hz)
25	470	10*12.5	117.5	15	2500	0.14
	560	10*16.5	140.0	12	2900	0.14
35	330	10*12.5	115.5	15	2500	0.12
	470	10*16.5	164.5	12	2900	0.12
50	150	10*12.5	75.0	20	2250	0.10
	220	10*16.5	110.0	15	2600	0.10
63	100	10*12.5	63.0	20	2100	0.08
	150	10*16.5	94.5	15	2400	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