

# Dongguan Heyue Electronics Co., Ltd

## FOR APPROVAL

### DIMENSIONS(mm)

■ Chip Type

Fig.1  $\Phi D=6.3\sim10mm$

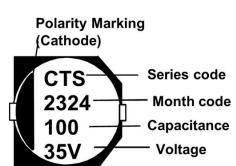
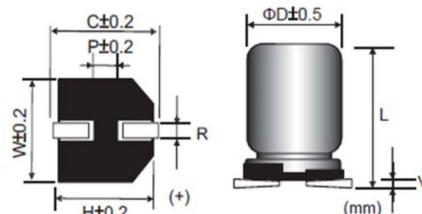
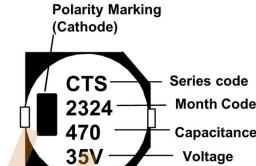


Fig.2  $\Phi D \geq 12.5mm$



Size	$\Phi D$	L	W	H	C	R	P	Vmax
6.3*6	6.3	$6.0 \pm 0.3$	6.6	6.6	7.2	0.5~0.8	2.1	0.3
6.3*7.7	6.3	$7.7 \pm 0.3$	6.6	6.6	7.2	0.5~0.8	2.1	0.3
8*10	8.0	$10 \pm 0.5$	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10*10	10.0	$10 \pm 0.5$	10.3	10.3	11.0	0.7~1.3	4.5	0.3
12.5*13.5	12.5	$13.5 \pm 0.5$	13.0	13.0	13.7	1.1~1.4	4.5	0.4
16*16.5	16.0	$16.5 \pm 0.5$	17.0	17.0	18.0	1.4~1.8	6.4	0.4
18*21.5	18.0	$21.5 \pm 1.0$	19.0	19.0	20.0	1.4~1.8	6.4	0.4

Customer:	Electrolytic Capacitors HTS Series								Heyue			
									Code			
Electric Characteristics:												
P/N	Heyue P/N	Cap. ( $\mu F$ )	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. ( $^{\circ}C$ )	Nominal Case Size	Leakage Current Max ( $\mu A$ )	D.F. MAX (%)	R.C 100KHz (mA rms)	ESR 100KHz at $25^{\circ}C (\Omega)$ Max	Load Life (hours)
	HTS1C331M0810VG-A	330	$\pm 20$	16	18.4	125	8*10	52.8	20	300	0.180	2000

### REMARKS:

1. Leakage Current Test: 10V ~100V at  $20^{\circ}C$  for 2 minutes ;
2. Operating temperature: 10V~100V -40 $^{\circ}C$  ~ +125 $^{\circ}C$  ;  
at 20 $^{\circ}C$ , 120 Hz.
3. Dissipation Factor Test:  
at 20 $^{\circ}C$ , 120 Hz.
4. Capacitance Test:  
at 125 $^{\circ}C$ , 100K Hz ;
5. Ripple Current Test:  
6.3Φ~10Φ:2000 hours;Φ12.5:3000 hours;Φ16:5000 hours;
6. Load Life:  
with application of rated voltage at 125 $^{\circ}C$ .  
Within  $\pm 30\%$  of initial value;  
300% or less of initial specified value;  
Initial specified value or less;
- Capacitance Change:  
The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}C$  after exposing them for 1000 hours 125 $^{\circ}C$  without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to item 4.1 of JIS C5101-4.  
Within  $\pm 30\%$  of initial value;  
300% or less of initial specified value;  
Initial specified value or less;
- Leakage Current:  
Load life & shelf life test and etc. , judgment standard reference to our catalogue.
8. when have characteristic requested:  
Heyue Part Number with suffix code "A" is specially offered for automotive project, which meets AEC-Q200 standard.

### SPECIFICATION

Leakage Current 洩漏電流	After 2 minutes application of rated voltage, leakage current is not more than 0.01cv or 3( $\mu A$ ), whichever is greater.							
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature:20 $^{\circ}C$							
Low Temperature Stability 低溫特性	Rate Voltage(V)							
Impedance Ratio(MAX) 阻抗比率(MAX)	tan δ (MAX)							
Measurement Frequency:120Hz.	10 16 25 35 50 63 100							
Rate Voltage(V)	0.24 0.20 0.20 0.14 0.14 0.12 0.10							
Z(-25 $^{\circ}C$ )/Z(20 $^{\circ}C$ )	5 5 2 2 2 2 2							
Z(-40 $^{\circ}C$ )/Z(20 $^{\circ}C$ )	8 8 4 3 3 3 3							

### Frequency Coefficient of Permissible Ripple Current

Frequency (Hz) Coefficient	$100 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F$
全系列	0.60	0.85	0.93	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 $^{\circ}C$  rise.  
When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date:2023.09.14