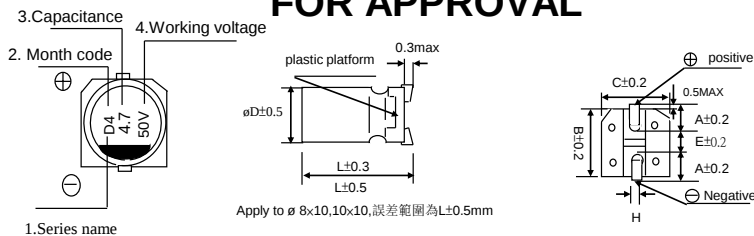


Dongguan Heyue Electronics Co., Ltd

DIMENSIONS(mm)

■ Chip Type

FOR APPROVAL

[illegible]

Customer:			Electrolytic Capacitors							Heyue			
			HD Series							Code			
Electric Characteristics:													
P/N	Heyue P/N	Cap.	Cap.	Rate	Surge	Oper.	Nominal	Leakage	D.F.	R.C	IMP	Load	
		(uF)	Tol. (%)	Volt. (V-DC)	Volt. (V-DC)	Temp. (°C)	Case Size D*L(mm)	Current Max (uA)	MAX (%)	100KHz (mA rms)	100KHz at 25°C (Ω)Max	Life (hours)	
	HD1V100M0505VG-A	10	±20	35	40.2	105	5*5.4	3.5	13	150	1.2	2000	

REMARKS:

- | | |
|---|--|
| 1. Leakage Current Test: | 6.3V ~100V at 20°C for 2 minutes ; |
| 2. Operating temperature: | 6.3V~100V -55°C~ +105°C ; |
| 3. .Dissipation Factor Test: | at 20°C, 120 Hz. |
| 4. Capacitance Test: | at 20°C, 120 Hz. |
| 5. Ripple Current Test: | at 105°C, 100K Hz ; |
| 6. Load Life: | 3000 hours, with application of rated voltage at 105°C.
(L<10mm, 2000 hours;) |
| Capacitance Change: | Within ±30% of initial value; |
| tanδ: | 300% or less of initial specified value; |
| Leakage Current: | Initial specified value or less; |
| 7. Shelf Life: | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applide. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4. |
| Capacitance Change: | Within ±30% of initial value; |
| tanδ: | 300% or less of initial specified value; |
| Leakage Current: | Initial specified value or less; |
| 8. when have characteristic requested : | Load life & shelf life test and etc. , judgment standard reference to our catalogue. |
| 9.Remarks: | 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(μA),whichever is greater.									
Dissipation Factor 散逸因素（損失角） (tan δ)	Measurement Frequency:120Hz. Temperature:20℃									
	Rate Voltage(V)	6.3	10	16	25	35	50	63	80	100
	tan δ (MAX)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07
Low Temperature Stability 低溫特性	Measurement Frequency:120Hz.									
	Rate Voltage(V)	6.3	10	16	25	35	50	63	80	100
Impedance Ratio(MAX) 阻抗比率(MAX)	Z(-25℃)/Z(20℃)	4	3	2	2	2	2	2	2	2
	Z(-55℃)/Z(20℃)	8	5	4	3	3	3	3	3	3
●Frequency Coefficient of Permissible Ripple Current										
Frequency(Hz)	120 ≤ F< 1K	1K ≤ F< 10K			10K ≤ F< 100K			100K ≤ F		
≤33	0.35	0.70			0.90			1.00		
33~150	0.40	0.85			0.92			1.00		
>150	0.60	0.85			0.95			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°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.