

FEATURES

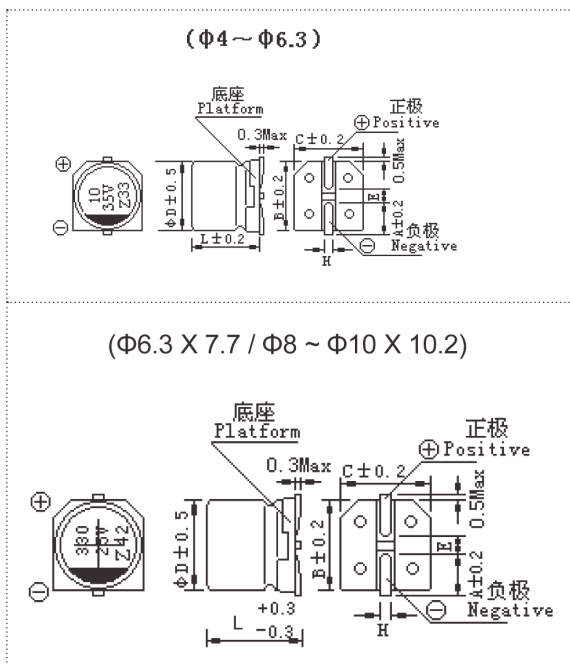
- Life time: 105°C, 2,000Hrs
- Reflow soldering is available
- Available for high density surface mounting
- High stability and reliability
- Low impedance



SPECIFICATIONS

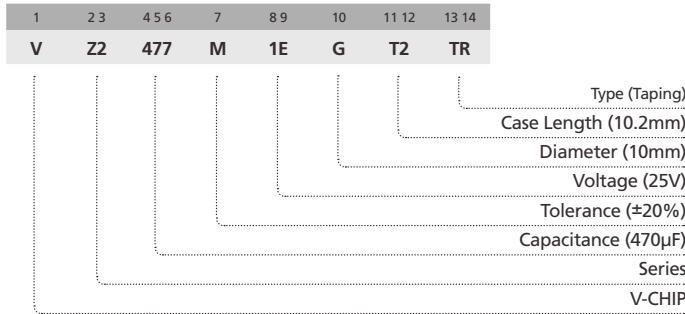
Item	Performance Characteristics										
Operating Temperature Range	-55 to +105°C										
Rated Working Voltage Range	6.3 to 100V										
Nominal Capacitance Range	1 to 1500μF										
Capacitance Tolerance	±20% at 120Hz, +20°C										
Leakage Current	$I \leq 0.01CV$ or $3(\mu A)$ whichever is greater measure after 2 minutes application of rated working voltage at +20°C										
tanδ (120Hz, +20°C)	Working Voltage (V)	6.3	10	16	25	35	50	63	80	100	
	tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08	0.08	
Low Temperature Characteristics	Impedance ratio max. at 120Hz										
	Working Voltage (V)	6.3	10	16	25	35	50	63	80	100	
	Z-25°C / Z+20°C	2	2	2	2	2	2	2	2	2	
	Z-40°C / Z+20°C	3	3	3	3	3	3	3	3	3	
High Temperature Loading	Test time	: 2,000 hours				Post test requirements at +20°C					
	Test temperature	: +105°C				Leakage current : ≤Initial specified value					
Shelf Life	Test conditions	: Rated DC working voltage				Cap. change : within ±20% of the initial measured value (≤16V:within ±25%)					
						tanδ : ≤200% of the initial specified value					
		At +105°C no voltage applied after 1,000 hours and then being stabilized at +20°C the capacitors shall meet the following limits									
Industrial Standard	Leakage current	: ≤200% of initial specified value									
	Cap. change	: within ±20% of the initial measured value									
	tanδ	: ≤120% of the initial specified value									

DIMENSIONS & MARKING



Size	Φ4x5.4	Φ5x5.4	Φ6.3x5.4	Φ6.3x7.7	Φ8x6.2	Φ8x10.2	Φ10x10.2
A	1.8	2.2	2.6	2.6	2.9	2.9	3.3
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
L	5.4	5.4	5.4	7.7	6.2	10.2	10.2
H	0.5 - 0.9				0.9 - 1.1		

PART NUMBER SYSTEM (EXAMPLE: 25V 470µF)



STANDARD RATINGS

Voltage (Code)		6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
4.7	475										4 x 5.4	2.2	80	4 x 5.4	2.2	80
10	106							4 x 5.4	2.2	80	4 x 5.4	2.2	80	5 x 5.4	1.2	150
22	226	4 x 5.4	2.2	80	4 x 5.4	2.2	80	5 x 5.4	1.2	150	6.3 x 5.4	0.58	230	6.3 x 5.4	0.58	230
33	336	5 x 5.4	1.2	150	5 x 5.4	1.2	150	6.3 x 5.4	0.58	230	6.3 x 5.4	0.58	230	6.3 x 5.4	0.58	230
47	476	5 x 5.4	1.2	150	6.3 x 5.4	0.58	230	6.3 x 5.4	0.58	230	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280
100	107	6.3 x 5.4	0.58	230	6.3 x 7.7	0.34	280	6.3 x 5.4	0.52	230	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450
		6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	8 x 6.2	0.26	300			
150	157	6.3 x 5.4	0.58	230	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	10 x 10.2	0.1	670
		6.3 x 5.4	0.58	243	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	384	8 x 10.2	0.17	450	8 x 10.2	0.17	587
220	227	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.1	670
		6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.1	670	10 x 10.2	0.1	670
330	337	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.1	670	10 x 10.2	0.1	670
470	477	8 x 10.2	0.17	450	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.1	670			
		8 x 10.2	0.17	450	10 x 10.2	0.1	670	10 x 10.2	0.1	670						
1000	108	10 x 10.2	0.1	670	10 x 10.2	0.1	670	10 x 10.2	0.1	670						
1500	158	10 x 10.2	0.1	670												

Maximum Allowable Ripple Current (mA rms) at 105°C 100kHz

Case Size Φ D x L (mm)

Maximum ESR (Ω) at 20°C 100kHz

Voltage (Code)		50V (1H)			63V (1J)			80V(1K)			100V (2A)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
1	105	4 x 5.4	4.5	60									
2.2	225	4 x 5.4	4.5	60									
3.3	335	4 x 5.4	4.5	60				5 x 5.4	5	25			
4.7	475	5 x 5.4	3.5	85	5 x 5.4	3	50	6.3 x 5.4	3	40			
		6.3 x 5.4	1.8	165	6.3 x 7.7	1.2	120	6.3 x 7.7	2.4	60			
22	226	6.3 x 7.7	1.6	185	6.3 x 7.7	1.2	120	8 x 10.2	1.3	130	8 x 10.2	1.3	130
		8 x 6.2	1.2	120	8 x 10.2	1.3	130	10 x 10.2	0.7	200			
33	336	6.3 x 7.7	1.6	185	8 x 10.2	0.65	250	8 x 10.2	1.3	130	10 x 10.2	0.7	200
47	476	8 x 10.2	0.4	300	8 x 10.2	0.65	250	10 x 10.2	0.7	200			
		10 x 10.2	0.3	342	8 x 10.2	0.65	250						
68	686	10 x 10.2	0.3	342	8 x 10.2	0.65	250						
100	107	10 x 10.2	0.22	670	10 x 10.2	0.35	400						
150	157	10 x 10.2	0.2	670									
220	227	10 x 10.2	0.18	670									

Maximum Allowable Ripple Current (mA rms) at 105°C 100kHz

Case Size Φ D x L (mm)

Maximum ESR (Ω) at 20°C 100kHz

Specifications are subject to change without notice. Should a safety or technical concern arise regarding the product, please be sure to contact our sales offices or agents immediately.