

FEATURES

- ↗ Reflow soldering is available
- ↗ Available for high density surface mounting
- ↗ High stability and reliability
- ↗ Life time: 85°C, 2,000Hrs

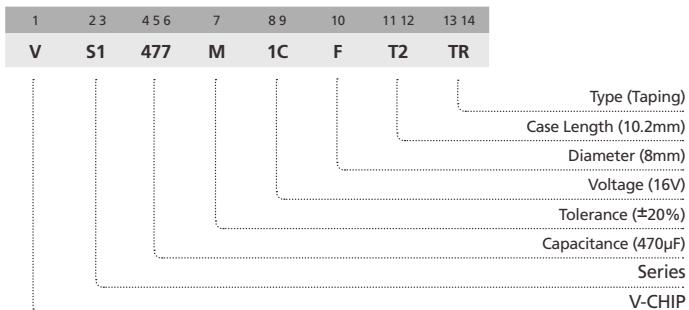
**SPECIFICATIONS**

Item	Performance Characteristics						
Operating Temperature Range	-40 to +85°C						
Rated Working Voltage Range	6.3 to 50V						
Nominal Capacitance Range	0.1 to 1500μF						
Capacitance Tolerance	±20% at 120Hz, +20°C						
Leakage Current	I ≤ 0.01CV or 3(μA) 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
	tanδ (max.) $\Phi 4\sim 6.3$	0.26	0.22	0.18	0.16	0.13	0.12
Low Temperature Characteristics	tanδ (max.) $\Phi 8\sim 10$	0.35	0.26	0.20	0.16	0.14	0.12
	Impedance ratio max. at 120Hz						
	Working Voltage (V)	6.3	10	16	25	35	50
High Temperature Loading	Z-40°C / Z+20°C	8	8	4	4	3	3
	Test time	: 2,000 hours					Post test requirements at +20°C
	Test temperature	: +85°C					Leakage current : ≤Initial specified value
Shelf Life	Test conditions	: Rated DC working voltage					Cap. change : within ±20% of the initial measured value
							tanδ : ≤200% of the initial specified value
		At +85°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	: ≤200% of the initial specified value					
Industrial Standard		JIS C - 5101-4 (IEC 60384-4)					

DIMENSIONS & MARKING

(Φ4 ~ Φ6.3)	Size	Φ4x5.4	Φ5x5.4	Φ6.3x5.4	Φ6.3x7.7	Φ8x10.2	Φ10x10.2
	A	1.8	2.1	2.4	2.5	2.9	3.2
	B	4.3	5.3	6.6	6.6	8.3	10.3
	C	4.3	5.3	6.6	6.6	8.3	10.3
	E	1.0	1.3	2.2	2.2	3.1	4.5
	L	5.4	5.4	5.4	7.7	10.2	10.2
	H	0.5 ~ 0.9					0.9 ~ 1.1
(Φ6.3x7.7)	Size	Φ6.3x7.7	Φ6.3x7.7	Φ6.3x7.7	Φ6.3x7.7	Φ6.3x7.7	Φ6.3x7.7
(Φ8 ~ Φ10x10.2)	Size	Φ8x10.2	Φ8x10.2	Φ8x10.2	Φ8x10.2	Φ8x10.2	Φ8x10.2

PART NUMBER SYSTEM (EXAMPLE: 16V 470μF)



STANDARD RATINGS

Voltage (Code)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)	
Cap. (μF)	Code	Case Size	Ripple Current						
4.7	475							4 x 5.4	16
10	106					4 x 5.4	23	4 x 5.4	24
22	226	4 x 5.4	28	4 x 5.4	30	5 x 5.4	37	5 x 5.4	38
33	336	5 x 5.4	37	5 x 5.4	41	5 x 5.4	44	6.3 x 5.4	52
47	476	5 x 5.4	45	6.3 x 5.4	52	5 x 5.4	48	6.3 x 5.4	60
		5 x 5.4	50	6.3 x 5.4	76	6.3 x 5.4	86	6.3 x 7.7	130
		6.3 x 5.4	70						
100	107	6.3 x 5.4	95	6.3 x 7.7	150	6.3 x 7.7	150	8 x 10.2	232
220	227	6.3 x 7.7	150	8 x 10.2	240	8 x 10.2	270	10 x 10.2	305
330	337	8 x 10.2	265	8 x 10.2	290	8 x 10.2	280	10 x 10.2	393
470	477	8 x 10.2	265	8 x 10.2	290	10 x 10.2	330		
1000	108	10 x 10.2	400	10 x 10.2	454				
1500	158	10 x 10.2	489						

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz

Case Size ϕ D x L (mm)

Voltage (Code)		35V (1V)		50V (1H)	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current
0.1	104			4 x 5.4	1.0
0.22	224			4 x 5.4	2.0
0.33	334			4 x 5.4	2.8
0.47	474			4 x 5.4	4.0
1	105			4 x 5.4	8.4
2.2	225			4 x 5.4	13
3.3	335	4 x 5.4	18	4 x 5.4	17
4.7	475	4 x 5.4	20	5 x 5.4	20
10	106	5 x 5.4	29	6.3 x 5.4	33
22	226	6.3 x 5.4	46	6.3 x 5.4	43
33	336	6.3 x 5.4	53	6.3 x 7.7	85
47	476	6.3 x 5.4	55	6.3 x 7.7	90
		6.3 x 7.7	70	8 x 10.2	140
100	107	6.3 x 7.7	80	8 x 10.2	145
		8 x 10.2	175	10 x 10.2	195
220	227	8 x 10.2	185		
		10 x 10.2	265	10 x 10.2	415
330	337	10 x 10.2	324		
470	477	10 x 10.2	395		

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz

Case Size ϕ D x L (mm)

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.