

## TV Series High Temperature 125°C

### Features

- ◆ Chip type ,operating temperature range-40 to +125°C
- ◆ Designed for surface mounting on high density PC board
- ◆ Applicable to automatic insertion machine using carrier tape
- ◆ For detail specifications, please refer to Engineering Bulletin NO. E157
- ◆ RoHS Compliant



SMD

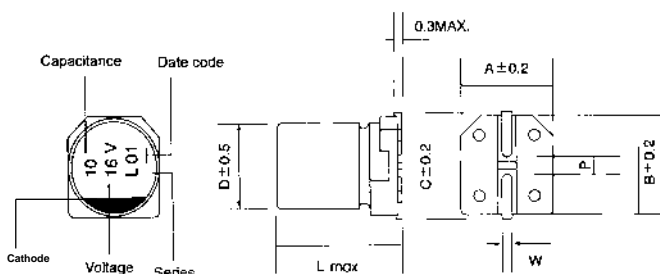
### Specifications

Item	Performance Characteristics					
Operating Temperature Range	-40~+125°C					
Rated Voltage Range	10~50 VDC					
Capacitance Range	10 to 330 μ F					
Capacitance Tolerance	±20%(120Hz,+20°C)					
Leakage Current (+20°C,max.)	I ≤0.03 CV or 4 (μ A)After 1 minutes whichever is greater measured with rated working voltage applied.					
Dissipation Factor (tan δ , at 20°C , 120Hz)	Working Voltage(VDC)	10	16	25	35	50
	D.F.(%)max.	32	24	21	18	18
Low Temperature Characteristics (at 120Hz)	Impedance ratio max					
	Working voltage(VDC)	10	16	25	35	50
	Z-25°C / Z+20°C	12	8	6	4	4
Load Life	Test condition					
	Duration time	: 1000 Hrs (Φ8X6.5mm & 6.3X7.7mm) ; 2000Hrs (Φ8X10.5mm & 10X10.5mm)				
	Ambient temperature	:+125°C				
	Applied voltage	:Rated DC working voltage				
	After test requirement at +20°C					
	Capacitance change	: Within ±30% of initial value				
	Dissipation factor	: Less than 300% of specified value				
	Leakage current	: Less than specified value				
Shelf Life	Test condition					
	Duration time	:1000 Hrs				
	Ambient temperature	:+125°C				
	Applied voltage	:None				
	After test requirement at +20°C	:Same limits as Load life.				
	Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.					
Resistance to soldering heat	The following specifications shall be satisfied when the capacitors are restored to20°C after exposing them at 250°C for 30 seconds.					
	Leakage current	Less than specified value				
	Capacitance change	Within ±10% of initial value				
	tan δ	Less than specified value				

### Multiplier for Ripple Current vs. Frequency

CAP(μ F)\Frequency(Hz)	60(50)	120	500	1K	≥10K
0.1~47 μ F	0.8	1.0	1.20	1.30	1.50
100~1000 μ F	0.8	1.0	1.10	1.15	1.20

### Diagram of Dimensions:(unit:mm)



φD	L	A	B	C	W	P
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5

## Case Size

φ DxL(mm)

WV(SV) Cap(μF)	10 (13)		16 (20)		25 (32)		35 (44)		50 (63)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
10									6.3X7.7	22
									8X6.5	24
22									6.3X7.7	35
									8X6.5	38
33							6.3X7.7	40		
							8X6.5	44	8X10.5	46
47					6.3X7.7	45				
					8X6.5	48	8X10.5	52	10X10.5	58
100	6.3X7.7	53								
	8X6.5	58	8X10.5	66	8X10.5	74	10X10.5	80		
220	8X10.5	90	10X10.5	102	10X10.5	116				
330	10X10.5	112								

Ripple Current ( mA, rms ) at 125°C 120Hz