TV Series High Temperature 125℃

Features

- ◆ Chip type ,operating temperature range-40 to +125℃
- ◆ Designed for surface mounting on high density PC board
- ◆ Applicable to automatic insertion machine using carrier tape
- ◆ RoHS Compliant

Specifications

Item	Performance Characteristics	
Operating Temperature Range	-40~+125℃	
Rated Voltage Range	10~100 VDC	150~450 VDC
Capacitance Range	10 to 330 μF	1 to 18 μF
Capacitance Tolerance	±20%(120Hz,+20℃)	
Leakage Current (+20℃,max.)	I≦0.03 CV or 3 (μA) whichever is greater (1 minutes)	I≦0.04 CV+100 μA (1 minute)

Dissipation Factor (tan δ ，at 20℃，120Hz)

Working Voltage(VDC)	10	16	25	35	50	160～200	250~400	450
D.F.(%)max.	32	24	21	18	18	20	25	30

Low Temperature Characteristics (at 120Hz)

Impedance ratio max

Working voltage(VDC)	10	16	25	35	50	160	200	250	400	450
Z-25℃ / Z+20℃	12	8	6	4	4	8	8	8	12	15

Endurance

Test condition
Duration time : 1000 Hrs (Φ8X6.5mm & 6.3X7.7mm) ; 2000Hrs (Φ8X10.5mm & 10X10.5mm)
Ambient temperature :+125℃
Applied voltage :Rated DC working voltage
After test requirement at +20℃
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℃
Applied voltage :None
After test requirement at +20℃ :Same limits as Endurance.
Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.

Resistance to soldering heat

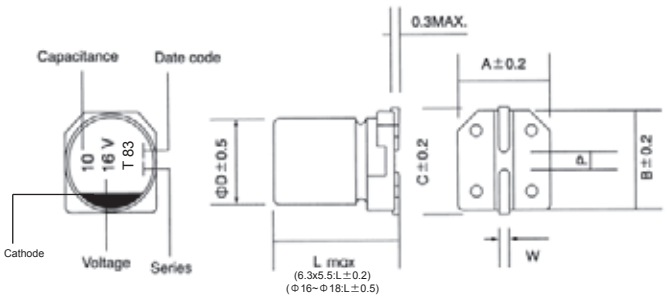
The following specifications shall be satisfied when the capacitors are restored to20℃ after exposing them at 250℃ for 30 seconds.

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

Frequency(Hz)	60(50)	120	500	1K	≧10K
0.1~47 μF	0.80	1.00	1.20	1.30	1.5
100~1000 μF	0.80	1.00	1.10	1.15	1.2

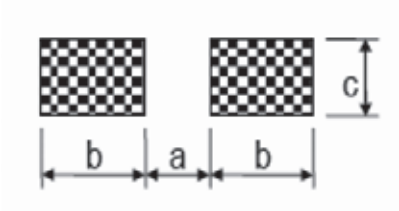
Diagram of Dimensions:(unit:mm)



ϕD	L	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	6.1	6.6	6.6	7.2	0.5~0.8	2.2
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
12.5	14	13.0	13.0	13.9	1.0~1.4	4.5
16	17	17.0	17.0	18.0	1.0~1.4	6.6
16	21.5	17.0	17.0	18.0	1.0~1.4	6.6
18	16.5	19.0	19.0	20.0	1.0~1.4	6.6
18	21.5	19.0	19.0	20.0	1.0~1.4	6.6

SMD

Recommended land pattern:(unit:mm)



ΦDxL	a	b	c
4xall	1	2.6	1.6
5xall	1.4	3	1.6
6.3xall	2.1	3.5	1.6
8xL(height ≤6.5)	2.1	4.5	1.6
8xL(height>6.5)	2.8	4.2	1.9
10xall	4.3	4.4	1.9
12.5xall	4.3	5.8	2.5
16xall	6	6.5	3.5
18xall	6	7.5	3.5

Case Size

WV (Vdc)	Cap (uF)	Size (mm)	Rated Ripple current (mArms/125℃ /120Hz)
10	100	6.3x7.7	53
10	100	8x6.5	58
10	220	8x10.5	90
10	330	10x10.5	112
16	100	8x10.5	66
16	220	10x10.5	102
25	47	6.3x7.7	45
25	47	8x6.5	48
25	100	8x10.5	74
25	220	10x10.5	116
35	33	6.3x7.7	40
35	33	8x6.5	44
35	47	8x10.5	52
35	100	10x10.5	80
50	10	6.3x7.7	22
50	10	8x6.5	24
50	22	6.3x7.7	35
50	22	8x6.5	38
50	33	8x10.5	46
50	47	10x10.5	58

WV (Vdc)	Cap (uF)	Size (mm)	Rated Ripple current (mArms/125℃ /120Hz)
160	6.8	8x10.5	42
160	10	10x10.5	59
160	18	10x10.5	65
200	4.7	8x10.5	36
200	6.8	10x10.5	59
200	10	10x10.5	59
250	3.3	8x10.5	28
250	4.7	10x10.5	59
400	1	8x10.5	27
400	1.8	8x10.5	30
400	2.2	8x10.5	33
400	2.2	10x10.5	37
400	3.3	8x10.5	36
400	3.3	10x10.5	39
400	4.7	10x10.5	46
400	5.6	10x10.5	50
450	2.2	8x10.5	28
450	3.3	10x10.5	32
450	3.9	10x10.5	38