

TS13E CDHEC



FEATURES

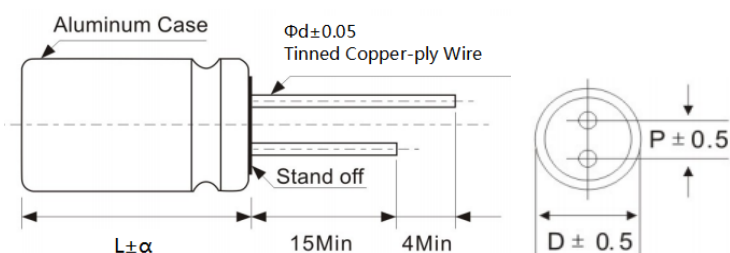
- Low ESR, high ripple current, high temperature
- Endurance: 2000 hours at 125°C

◆ Specifications

I T E M S		C H A R A C T E R I S T I C S									
Category Temperature Range (°C)	-55 ~ +125										
Rated Voltage Range	2.5 ~ 25V										
Capacitance Tolerance (20°C, 120Hz)	±20%										
Leakage Current	I ≤ 0.2CV or 500μA whichever is greater Less than or equal to the specified value. After 2 minutes application of rated Voltage at 20°C										
Dissipation Factor (20°C, 120Hz)	Rated Voltage (V)	2.5	4	6.3	6.8	7.5	10	12	16	20	25
	tanδ (Max.)	0.08					0.12				
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25°C)/Z(+20°C)	≤ 1.25					(100KHz)				
	Z(-55°C)/Z(+20°C)	≤ 1.25									
Endurance	The specifications listed below shall be satisfied when the capacitors are restored to 20°C after application of rated voltage for 2000 hours at 105°C.										
	Appearance	No significant damage									
	Capacitance change	≤ ±20% of the initial value									
	D.F.(tanδ)	≤ 150% of the specified value									
	ESR	≤ 150% of the specified value									
Leakage current	≤ The specified value										
Damp Heat (Steady State)	The specifications listed below shall be satisfied when the capacitors are restored to 20°C after application of rated voltage for 1000 hours at 60°C, 90% ~ 95% RH.										
	Appearance	No significant damage									
	Capacitance change	≤ ±20% of the initial value									
	D.F.(tanδ)	≤ 150% of the specified value									
	ESR	≤ 150% of the specified value									
Leakage current	≤ The specified value										
Surge Voltage	Surge Voltage=Rated voltage × 1.15(V) The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages specified at 125°C for 30 seconds through a protective resistor (Rc=1kΩ) and discharge for 5 minutes 30 seconds.										
	Appearance	No significant damage									
	Capacitance change	≤ ±20% of the initial value									
	D.F.(tanδ)	≤ 150% of the specified value									
	ESR	≤ 150% of the specified value									
Leakage current	≤ The specified value										

Dimensions

mm



ΦD	5	5.5	6.3	8	10
P	2.0	2.5	2.5	3.5	5.0
Φd	0.5	0.5	0.6	0.6	0.6

α	(L < 16)	1.0
	(16 ≤ L < 22)	1.5
	(L ≥ 22)	2.0

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◆ RATED RIPPLE CURRENT COEFFICIENT

Frequency(Hz)	$120\text{Hz} \leq f < 1\text{kHz}$	$1\text{kHz} \leq f < 10\text{kHz}$	$10\text{kHz} \leq f < 100\text{kHz}$	$100\text{kHz} \leq f < 500\text{kHz}$
Coefficient	0.05	0.30	0.70	1.00

◆ STANDARD RATINGS

Rated Voltage	Rated Capacitance (μF)	Case Size ΦDxL (mm)	ESR (mΩ) at 20°C, 100 KHz	Leakage Current (μA)	Rated Ripple Current (mA _{rms} /125°C/100kHz)
2.5	560	6.3x8	10	500	1700
	680	6.3x8	10	500	1700
	820	8x9	10	500	1929
	1000	8x9	10	500	1929
		8x12	10	500	1929
	1500	8x12	10	750	1929
4	2200	10x12.5	9	1100	2100
	560	6.3x8	12	500	1700
		6.3x8	12	544	1700
	680	8x9	10	544	1929
		8x9	10	656	1929
	1000	8x9	10	800	1929
8x12		10	800	1929	
1500	10x12.5	9	1200	2100	
6.3	220	5x8	18	500	1500
		6.3x8	15	500	1700
	330	6.3x8	15	500	1700
	470	6.3x8	15	592	1700
	560	6.3x8	15	706	1700
	680	8x9	12	857	1929
		8x9	12	1033	1929
	1000	8x9	12	1260	1929
		8x12	12	1260	1929
		10x12.5	12	1260	2100
	1500	8x12	12	1890	1929
		10x12.5	12	1890	2100
10x12.5		12	2772	2100	
7.5	220	6.3x8	16	500	1700
	330	6.3x8	16	500	1700
	470	6.3x8	16	705	1700
	560	6.3x8	16	840	1700
	820	8x9	12	1230	1929
		8x12	12	1230	1929
	1000	8x12	12	1500	1929
		10x12.5	12	1500	2100
	1500	10x12.5	12	2250	2100

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◆ STANDARD RATINGS

Rated Voltage	Rated Capacitance (μF)	Case Size ΦDxL (mm)	ESR (mΩ) at 20°C, 100 KHz	Leakage Current (μA)	Rated Ripple Current (mArms/125°C/100kHz)
10	220	6.3x8	16	500	1700
	330	6.3x8	16	660	1700
	470	8x9	14	940	1929
	560	8x9	14	1120	1929
		8x12	14	1120	1929
	680	8x12	14	1360	1929
	820	8x12	14	1640	1929
		10x12.5	14	1640	2100
1000	10x12.5	14	2000	2100	
16	100	6.3x8	20	500	920
	220	6.3x8	18	704	950
		8x9	16	704	1850
	330	6.3x9	18	1056	1740
		8x9	16	1056	1850
	470	6.3x12	16	1504	1860
		8x12	15	1504	1920
	680	6.3x12	18	2176	1860
	820	6.3x14	18	2624	1920
1000	8x12	15	3200	1920	
25	100	5x9	50	500	750
		6.3x8	40	500	1100
	150	5x11	40	750	1270
	220	6.3x12	35	1100	1310
		8x9	35	1100	1470
		8x12	25	1100	1680
	330	6.3x12	35	1650	1470
		8x9	35	1650	1470
		8x12	25	1650	1680
	470	6.3x14	25	2350	1680
		8x12	25	2350	1680
	560	8x12	25	2800	1680
	680	10x12.5	20	3400	1860
	820	10x12.5	20	4100	1860
1000	10x12.5	20	5000	1860	

Note: Reflow soldering can only be used for SMD Conductive Polymer Aluminum Solid Electrolytic Capacitor.

Radial Conductive Polymer Aluminum Solid Electrolytic Capacitor are not suitable for reflow soldering, but only for wave soldering.

Note: Specification are subject to change without notice. For more detail and update, please visit our website.