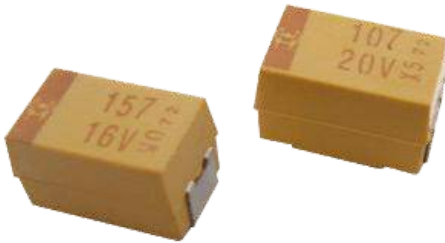


K53-74

TANTALUM SOLID-ELECTROLYTE CAPACITOR

AZHYAR.673546.011 TU

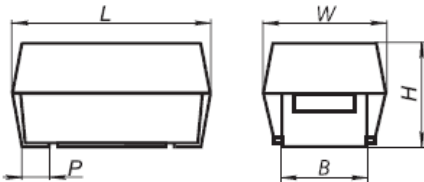
Low-voltage multi-sectional fixed capacitors with electrically conducting polymer and low ESR. Capacitors are suitable for application in direct current, ripple current and pulse current circuits in products intended for the internal wiring. Noncombustible



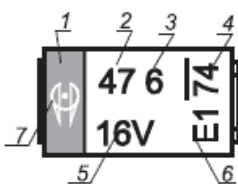
MAIN PARAMETERS

Name	Value
Rated voltage, V	2.5...16
Rated capacitance, μF	33...2 200
Capacitance tolerance (20°C, 50 Hz), %	± 10 ; ± 20 - for rated value $C_R=33 \mu\text{F}$; $68 \mu\text{F}$; ± 20 - for other rated values
Maximum operating temperature T_{env} , °C	+85
Minimal operating temperature T_{env} , °C	-60
Temporary overvoltage within 10 sec., V	1.15 U_R

CAPACITORS OVERALL DIMENSIONS AND MASS



Case code L	L, mm	W, mm	H, mm	P, mm	B, mm	Mass, g, max
E	7.3 \pm 0.3	4.3 \pm 0.3	4.1 \pm 0.3	1.3 \pm 0.3	2.4 \pm 0.1	0.7



- 1 – Positive terminal (color stripe)
- 2 – Rated capacitance, pF
- 3 – Capacitance multiplier code
- 4 – Product code (only “74” is marked, stripe unavailability is acceptable)
- 5 – Rated voltage, V
- 6 – Production date code
- 7 – Trade mark

MARKING CODES DESIGNATION

Code	Year
K	2018
L	2019
M	2020
N	2021
P	2022
R	2023
S	2024
T	2025
U	2026
V	2027
W	2028
X	2029

Code	Month	Code	Month
1	January	7	July
2	February	8	August
3	March	9	September
4	April	O	October
5	May	N	November
6	June	D	December

Capaci-tance multi-plier code	Capaci-tance multi-plier
4	10^4
5	10^5
6	10^6
7	10^7
8	10^8

CAPACITORS CASE CODES

$C_R, \mu F$	2.5	4	6.3	10	16
	U_R, V				
33					E
47				E	E
68			E	E	E
100			E	E	E
150			E	E	E
220		E	E	E	E
330		E	E	E	
470	E	E	E	E	
680	E	E	E		
1 000	E	E			
1 500	E				
2 200	E				

CAPACITOR ELECTRIC PARAMETERS VALUE WHEN DELIVERED

$C_R, \mu F$	$\text{tg } \delta, \%, 25^\circ\text{C}, 50 \text{ Hz, max}$	$I_{\text{LEAK}}, \mu\text{A}, 25^\circ\text{C, after 5 min., max}$	$\text{ESR, m}\Omega, 25^\circ\text{C}, 100\text{kHz, max}$	$I_R, \text{A}, 25^\circ\text{C}, 100\text{kHz, max}$
$U_R = 2.5 \text{ V}$				
470	6	118	27	2.5
680		170	27	2.5
1 000		250	25	2.6
1 500		375	23	2.7
2 200		550	20	2.9
$U_R = 4 \text{ V}$				
220	6	88	35	2.2
330		132	30	2.3
470		188	27	2.5
680		272	27	2.5
1 000		400	25	2.6
$U_R = 6.3 \text{ V}$				
68	6	42	45	1.9
100		63	42	2.0
150		94	40	2.0
220		138	35	2.2
330		208	30	2.3
470		296	27	2.5
680		428	27	2.5
$U_R = 10 \text{ V}$				
47	6	47	50	1.8
68		68	45	1.9
100		100	42	2.0
150		150	40	2.0
220		220	35	2.2
330		330	30	2.3
470		470	27	2.5
$U_R = 16 \text{ V}$				
33	6	53	70	1.5
47		75	60	1.7
68		109	55	1.7
100		160	50	1.8

$C_R, \mu F$	$\text{tg } \delta, \%, 25^\circ\text{C}, 50 \text{ Hz, max}$	$I_{\text{LEAK}}, \mu A, 25^\circ\text{C, after 5 min., max}$	$\text{ESR, m}\Omega, 25^\circ\text{C, 100kHz, max}$	$I_R, A, 25^\circ\text{C, 100kHz, max}$
150		240	45	1.9
220		352	45	1.9

CAPACITORS RELIABILITY

Reliability Operation modes	Minimal nonfailure operating time, t_λ , hours	Capacitor failure rate, λ , 1/hour, max
Maximum-permissible mode ($U_R, T_{\text{env}}=85^\circ\text{C}$)	20 000	10^{-6}
Light mode ($0.5U_R, T_{\text{env}}=55^\circ\text{C}$)	150 000	10^{-8}
Storageability Gamma-rated time of capacitor storageability T_{cy} at $y=99.5\%$, years, min	25	

EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K53-74 "E" – 4V – $470\mu \pm 20\%$ AZHYAR.673546.011 TU