Aluminum Electrolytic Capacitors
105°C 6000~10000Hrs

HTQ Series

MERITEK

FEATURE

- Operating Temperature: -40°C ~ +105°C
- Low Impedance at High Frequency
- Large Permissible Ripple Current
- Suitable for Electronic Ballast, Adaptor and Switching Power
- Load Life at +105°C

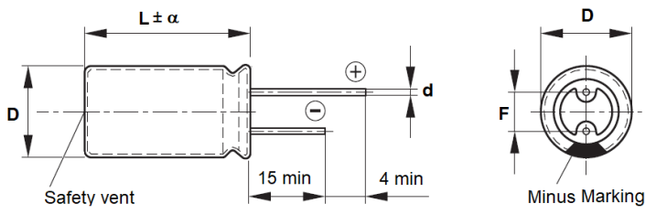
Diameter	5~6.3mm	8mm	≧10mm
Load Life	6000hrs	8000hrs	10000hrs

RoHS

SPECIFICATIONS

Item	Characteristic							
Operation Temperature	-40 ~ +105ºC							
Rated Working Voltage	6.3 ~ 100VDC							
Capacitance Tolerance	±20% (M); at 120Hz 20°C							
Leakage Current	I ≤ 0.01CV or 3μA, *After 2 minutes, at 20±2°C I : Leakage Current (μA), C: Capacitance (μF), V: Working Voltage (V)							
Dissipation Factor- tan δ at 120Hz 20°C	**Rated Voltage (V)**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**
	tan δ max	0.22	0.19	0.16	0.14	0.12	0.08	0.08	0.08
	Add 0.02 per 1000 μF for more than 1000 μF								
Ripple Current Coefficient -Frequency	**Capacitance (μF)**	**120Hz**		**1KHz**		**10KHz**		**100KHz**	
	≤33	0.85		1.00		0.90		1.00	
	33<Cap≤330	0.80		1.00		0.92		1.00	
	330<Cap≤1000	0.75		1.00		0.94		1.00	
	1000<Cap	0.70		1.00		0.96		1.00	
Ripple Current Coefficient - Temperature	**Temperature**	≤ 70°C		85°C		105°C		--	
	Factor	2.1		1.7		1.0		--	
Low Temperature Stability	**Rated Voltage (V)**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**
	-25°C / +20°C	2	2	2	2	2	2	2	2
	-40°C / +20°C	3	3	3	3	3	3	3	3
	Impedance ratio at 120Hz								
Damp Heat	Capacitance Change	≤ ±20% of initial value		After storage conditions of 40 ±2°C and R.H. of 90% to 95% for 240±8 hours, Stabilizing for 1 to 2 hours.					
	Dissipation Factor	≤ specified initial value							
	Leakage current	≤ specified initial value							
Load Life	**Capacitance Change**	≤ ±20% of initial value		Apply rated voltage for rated load life / temperature, Stabilized at +20°C					
	Dissipation Factor	≤ 200% of initial specified value							
	Leakage current	≤ initial specified value							
Shelf Life	**Capacitance Change**	≤ ±25% of initial value		After storage conditions without voltage applied for 1000 hours at Rated Temperature, Stabilizing at +20°C					
	Dissipation Factor	≤ 200% of initial specified value							
	Leakage current	≤ initial specified value							
Resistance to Soldering Heat	Capacitance Change	≤ ±20% of initial value		For other procedures than those specified, Soldering bath method: Temperature: 260 ±5°C Application time of soldering bath: 10 sec					
	Dissipation Factor	≤ initial specified value							
	Leakage current	≤ initial specified value							

DIMENSION



Unit: mm

D+0.5(max)	5	6.3	8	10	12.5	16	18
F±0.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d±0.05	0.5	0.5	0.6	0.6	0.6	0.8	0.8
α	1.0	1.0	1.0	1.5	1.5	1.5	1.5

CASE SIZE AND MAX RIPPLE CURRENT

Capacitance		6.3VDC (0J)			10VDC (1A)			16VDC (1C)		
		DxL	Impedance	RC	DxL	Impedance	RC	DxL	Impedance	RC
μF	Code	(mm)	(Ω)	mA(rms)	(mm)	(Ω)	mA(rms)	(mm)	(Ω)	mA(rms)
47	470	--	--	--	--	--	--	5x11	0.30	250
100	101	--	--	--	5x11	0.30	250	6.3x11	0.015	405
150	151	5x11	0.30	250	6.3x11	0.13	405	6.3x11	0.015	405
220	221	6.3x11	0.13	310	6.3x11	0.13	405	8x11.5	0.072	490
330	331	6.3x11	0.13	405	8x11.5	0.072	760	8x11.5	0.072	760
470	471	8x11.5	0.072	760	8x11.5	0.072	760	10x12.5	0.053	1030
680	681	10x12.5	0.053	1030	10x12.5	0.053	1030	10x16	0.038	1430
1000	102	10x12.5	0.053	1030	10x16	0.038	1430	10x20	0.023	1820
1200	122	10x16	0.038	1430	10x20	0.023	1820	10x20	0.023	1820
1500	152	10x20	0.023	1820	10x20	0.023	1820	12.5x20	0.021	2350
2200	222	10x20	0.023	1820	12.5x20	0.021	2360	12.5x25	0.018	2770
3300	332	12.5x20	0.021	2360	12.5x25	0.018	2770	16x25	0.016	3460
4700	472	12.5x25	0.018	2770	16x25	0.016	3460	--	--	--
6800	682	16x25	0.016	3460	--	--	--	--	--	--

Capacitance		25VDC (1E)			35VDC (1V)			50VDC (1H)		
		DxL	Impedance	RC	DxL	Impedance	RC	DxL	Impedance	RC
μF	Code	(mm)	(Ω)	mA(rms)	(mm)	(Ω)	mA(rms)	(mm)	(Ω)	mA(rms)
22	220	--	--	--	--	--	--	5x11	0.34	238
33	330	--	--	--	5x11	0.30	250	6.3x11	0.13	405
47	470	5x11	0.300	250	6.3x11	0.13	405	6.3x11	0.13	405
100	101	6.3x11	0.13	405	8x11.5	0.072	760	8x11.5	0.074	724
150	151	8x11.5	0.072	760	8x11.5	0.072	760	10x12.5	0.061	979
220	221	8x11.5	0.072	760	10x12.5	0.053	1030	10x16	0.042	1370
330	331	10x12.5	0.053	1030	10x16	0.038	1430	10x20	0.028	1870
470	471	10x16	0.038	1430	10x20	0.023	1820	12.5x20	0.027	2050
680	681	10x16	0.038	1550	12.5x20	0.021	2360	12.5x20	0.021	2860
1000	102	12.5x20	0.021	2360	12.5x20	0.018	2770	16x25	0.021	3010
1200	122	12.5x20	0.019	2650	--	--	--	--	--	--
1500	152	12.5x20	0.018	2770	16x25	0.016	3460	--	--	--
2200	222	12.5x25	0.016	3460	--	--	--	--	--	--
3300	332	16x31.5	0.015	3680	--	--	--	--	--	--

Capacitance		63VDC (1J)			100VDC (2A)		
		DxL	Impedance	RC	DxL	Impedance	RC
μF	Code	(mm)	(Ω)	mA(rms)	(mm)	(Ω)	mA(rms)
22	220	6.3x11	0.30	270	8x11.5	0.30	360
33	330	6.3x11	0.30	270	10x12.5	0.25	460
47	470	8x11.5	0.20	500	10x16	0.20	600
100	101	10x16	0.10	950	12.5x20	0.10	1050
150	151	10x20	0.08	1100	12.5x25	0.070	1200
220	221	12.5x20	0.07	1300	16x25	0.060	1650
330	331	12.5x20	0.04	1495	16x31.5	0.040	1770
470	471	12.5x25	0.035	1900	18x40	0.030	2080
680	681	16x25	0.03	2780			
1000	102	16x35.5	0.02	2840			

Note:
1.Max ripple current: mA (rms) at 105°C. 100KHz
2.Max impedance(Ω) at 100KHz

Aluminum Electrolytic Capacitors
105°C 6000~10000Hrs

HTQ Series

MERITEK

PART NUMBERING SYSTEM

HTQ	1H	101	M	H115	A	D
(1)	(2)	(3)	(4)	(5)	(6)	(7)

No	Item	Code	Description	Series Reference
(1)	**Meritek Series**	HTQ	Aluminum Electrolytic Capacitors	High temperature, 6000~10000Hrs 105°C
(2)	**Rated Voltage**	1H	1H: 50V	DC working voltage, See Table Below
(3)	**Capacitance**	101	101:100μF	First two digits: significant, Third: Multiplier
(4)	**Tolerance**	M	M: ± 20%	-20% ~ +20%
(5)	**Case Code**	H115	DxL: 8x11.5 mm	See Table Below
(6)	**Package**	A	A: Tape & Ammo	R: Tape & Reel, Blank : Bulk
(7)	**Pitch Code**	D	D: 3.5 mm	See Table Below, Blank: Bulk

Voltage	4	6.3	10	16	25	35	50	63	80	100	160	200	250	350	400	450	500
Code	0G	0J	1A	1C	1E	1V	1H	1J	1K	2A	2C	2D	2E	2V	2G	2W	2H

Diameter (mm)	4	5	6.3	8	10	12.5	14.5	16	18	20	22	25
Code	D	E	F	H	J	K	U	L	M	N	P	Q

Pitch (mm)	1.5	2	2.5	3.5	5	7.5	10	12.5
Code	A	B	C	D	E	F	J	K

*Specifications subject to change without notice.