

Data Sheet

Customer: _____

Product: Aluminum Electrolytic Capacitors – AE5R Series AEC-Q200 version available

Size : 4x5mm ~ 8x5mm

Issued Date: 16-Oct-2023

Edition: Ver. 1

Record of change

Date	Ver.	Description	Page
16-Oct-2023	1		

HITANO ENTERPRISE CORP.

7F-7, No. 3, Wu Chuan 1st Road, New Taipei Industrial Park,

New Taipei City, TAIWAN, R.O.C.

Tel: +886 2 2299 1331 (Rep.)

Fax: +886 2 2298 2466, 2298 2969

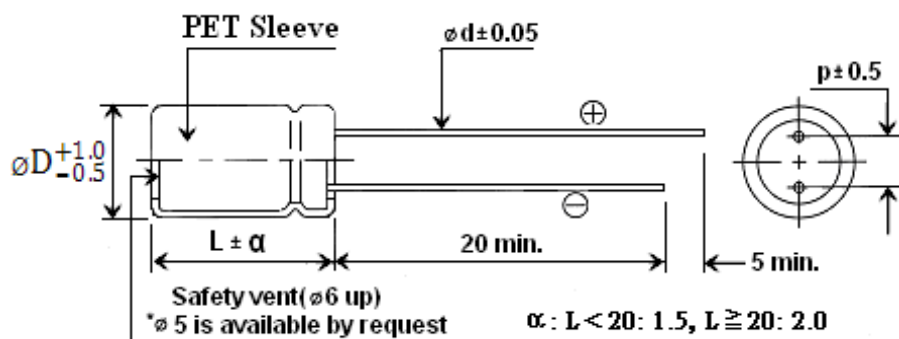
Prepared by	Checked by	Approved by	Accepted by (customer)
16-Oct-2023	16-Oct-2023	16-Oct-2023	
Andy Hsu	Hwa Wu	Hwa Wu	

- Ultra miniature Radial Type 5mm Height
- Designed for use in VCRs, car radios, Car stereos.
- AEC-Q200 version available

Characteristics

Voltage Range	4 ~ 50 V							
Capacitance Range	0.1 ~ 220uF							
Temperature Range	-40 ~ + 105°C							
Capacitance Tolerance	±20% at 120Hz , 20°C(10% Tol. is available upon request)							
Leakage Current	I≤0.01CV or 3uA, whichever is greater (After 2 minutes)							
Dissipation Factor	Rated Voltage (V)	4V	6.3V	10V	16V	25V	35V	50V
	Dissipation Factor(tanδ)max	0.35	0.24	0.20	0.16	0.14	0.12	0.10
	(at 20°C, 120Hz)							
Stability at Low Temperature	Impedance ration at 120Hz							
	Rated Voltage (V)	4V	6.3V	10V	16V	25V	35V	50V
	Z-25°C/Z 20°C	7	4	3	2	2	2	2
	Z-40°C/Z 20°C	15	8	6	4	4	3	3
Load Life (size 8x5mm is 85°C 1000hrs)	After the rated voltage has been applied for 1000 hours at 105°C	Capacitance change			Within ±20% of initial value			
		D.F. tanδ			200% or less of initial specified value			
		Leakage current			Less than Initial specified value			
Shelf Life (size 8x5mm is 85°C 500hrs)	After storage for 1000 hours at 105°C with no voltage applied, the capacitor shall meet the specified limit in load life. Pre-treatment for measurement shall be conducted after application of DC working voltage for 30 minutes.							

Diagram of dimensions



D ϕ	4	5	6.3	8
p	1.5	2.0	2.5	3.5
d ϕ	0.45			

Ripple Current Coefficients

Frequency (Hz)	50(60)	120	1K	≥ 10K
Cap.(uF) / Hz	Multiplier			
Cap. ≤ 10	0.65	1.0	1.30	1.50
10 < Cap. ≤ 100	0.8	1.0	1.15	1.20

Case Size of Standard Products & Maximum Ripple Current mA rms 105°C 120Hz

Cap. WV	4		6.3		10		16		25		35		50	
uF	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.
0.1												→	4x5	1.0
0.22		ALL BLANK VOLTAGE ON SLEEVE MARKING IS SAME VOLTAGE “→” POINT TO										→	4x5	2.0
0.33												→	4x5	2.8
0.47												→	4x5	4.0
1												→	4x5	8.0
2.2												→	4x5	10
3.3												→	4x5	17
4.7								→	4x5	16	4x5	18	5x5	20
10						→	4x5	23	4x5	27	5x5	30	6.3x5	33
22					4x5	28	5x5	37	5x5	42	6.3x5	46	6.3x5	48
33		→	→	→	5x5	41	5x5	49	6.3x5	53	8x5	62		
47	4x5	34	5x5	45	5x5	45	6.3x5	58	6.3x5	60	8x5	80		
100	5x5	50	6.3x5	56	6.3x5	70	6.3x5	85	8x5	95				
220	6.3x5	80	6.3x5	90	8x5	95								

*Size 8x5 is 85°C only.

Unit: mm

Part Numbering System

AE5R	101	M	25	A	—	T1
SERIES	CAPACITANCE	TOL.	W.V.	PACKAGE	SIZE	LEAD SPACE
	IN 3DIGITS	K= ± 10%	0G= 4V	B= Bulk	Omit if only	Omit if Bulk
	010= 1.0uF	M= ± 20%	0J= 6.3V	C5= Cut 5mm	one size	T1= L/S 2.5mm Taped
	4R7= 4.7 uF		10= 10V	A= Ammo Pack	A=Smaller	TA= Lead forming space 5mm Taped
	101= 100uF		25= 25V	R= Tape&Reel	size	T35= L/S 3.5mm Taped
	221= 220uF		50= 50V	F5= Lead formed & cut 5mm		T2=L/S 5mm Taped