

Data Sheet

Customer: _____

Product: Aluminum Electrolytic Capacitors – EMRL Series

Size : 4x7mm ~ 8x7mm

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Record of change

Date	Ver.	Description	Page
15-Aug-2016	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

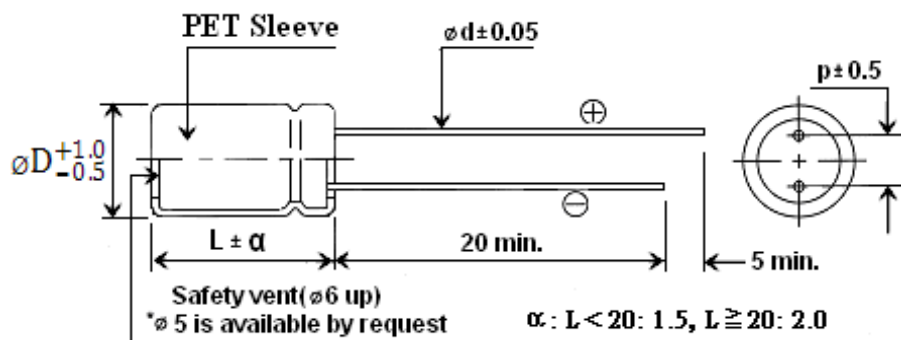
Prepared by	Checked by	Approved by	Accepted by (customer)
15-Aug-2016	15-Aug-2016	15-Aug-2016	
Andy Hsu	Hwa Wu	Hwa Wu	

- Super Miniature and Low leakage current
- Designed for use in VCRs, car radios, Car stereos.
- Micro-cassette tape recorders, pocket calculators and watches.

Characteristics

Voltage Range	6.3 ~ 63V							
Capacitance Range	0.47 ~ 100uF							
Temperature Range	-40 ~ + 105℃							
Capacitance Tolerance	±20% at 120Hz , 20℃ (10% Tol. is available upon request)							
Leakage Current	I≤0.002CV or 0.4uA, whichever is greater (After 3 minutes)							
Dissipation Factor	Rated Voltage (V)	6.3V	10V	16V	25V	35V	50V	63V
	Dissipation Factor(tanδ)max	0.24	0.20	0.16	0.14	0.12	0.10	0.10
	(at 20℃, 120Hz)							
Stability at Low Temperature	Impedance ration at 120Hz							
	Rated Voltage (V)	6.3V	10V	16V	25V	35V	50V	63V
	Z-25℃/Z 20℃	4	3	3	2	2	2	2
	Z-40℃/Z 20℃	10	6	6	4	4	4	3
Load Life	After the rated voltage has been applied for 1000 hours at 105℃	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	After storage for 1000 hours at 105℃ 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	400	1K	$\geq 10K$
Cap.(uF) / Hz	Multiplier				
Cap. ≤ 10	0.65	1.0	1.20	1.30	1.50
$10 < \text{Cap.} \leq 100$	0.8	1.0	1.10	1.15	1.20

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

Cap. WV	6.3		10		16		25		35		50		63	
uF	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.
0.47									→	→	4x7	7	4x7	7
1			ALL BLANK VOLTAGE ON SLEEVE MARKING IS SAME VOLTAGE “→” POINT TO						→	→	4x7	10	4x7	10
2.2									→	→	4x7	16	4x7	16
3.3									→	→	4x7	20	5x7	19
4.7									→	→	4x7	21	6.3x7	36
10			→	→	4x7	27	4x7	29	5x7	32	5x7	35		
22	→	→	4x7	36	4x7 5x7	36 40	5x7	44	6.3x7	49				
33	4x7	41	5x7	44	5x7	50	6.3x7	55	8x7	67				
47	5x7	44	5x7	49	6.3x7	62	8x7	74						
100	5x7	59	6.3x7	75										

Unit: mm

Part Numbering System

EMRL	101	M	25	A	—	T1
SERIES	CAPACITANCE	TOL.	W.V.	PACKAGE	SIZE	LEAD SPACE
	IN 3DIGITS	K= ± 10%	0J= 6.3V	B= Bulk	Omit if only	Omit if Bulk
	010= 1.0uF	M= ± 20%	10= 10V	C5= Cut 5mm	one size	T1= L/S 2.5mm Taped
	4R7= 4.7 uF		25= 25V	A= Ammo Pack	A=Smaller	TA= Lead forming space 5mm Taped
	101= 100uF		63= 63V	R= Tape&Reel	size	T35= L/S 3.5mm Taped
				F5= Lead formed & cut 5mm		T2=L/S 5mm Taped