FEATURES

ULTRA LOW ESR @ HIGH FREQUENCY
ULTRA HIGH RIPPLE CURRENT CAPABILITY
LOAD LIFE 2,000 HOURS
RoHs COMPLIANT

PART NUMBERING

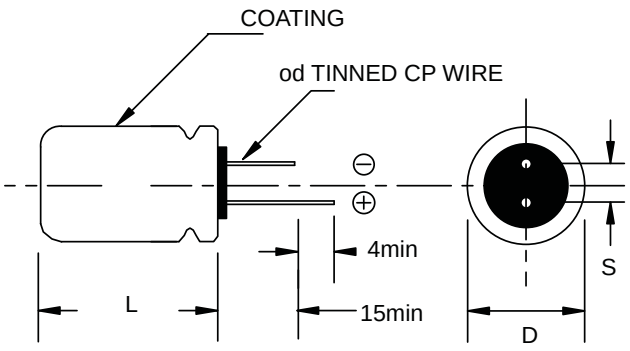
Part Number Example: CPU-010/821M10X12F							
CPU	**-**	**010**	**/**	**821**	**M**	**10X12**	**F**
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant
* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).							

SPECIFICATIONS

ITEM	CHARACTERISTICS	
OPERATING TEMPERATURE RANGE	-55+105°C	
WORKING VOLTAGE RANGE	2.5 ~ 10vdc	
CAPACITANCE RANGE	180 ~ 3,500μF	
CAPACITANCE TOLERANCE	±20% (120Hz 20°C)	
LEAKAGE CURRENT (+20°C) MAX	≤0.2 CV + 100μA AFTER 2 MINUTES @ rated voltage	
DF (%) @ 120Hz 20°C	SEE TABLE	
ESR @ 100 ~ 300KHz	SEE TABLE	
ENDURANCE 105°C 2,000Hrs @ RATED VOLTAGE	CAPACITANCE CHANGE	WITHIN ±20% PRE-TEST VALUE
	LEAKAGE CURRENT	LESS THAN SPECIFIED VALUE
	DF	LESS THAN 150% SPECIFIED VALUE
MOISTURE RESISTANCE @ 60°C RH 90 ~ 95% 2,000Hrs	CAPACITANCE CHANGE	WITHIN ±20% PRE-TEST VALUE
	LEAKAGE CURRENT	LESS THAN SPECIFIED VALUE
	DF	LESS THAN 150% SPECIFIED VALUE

FREQUENCY COEFFICIENT FOR RIPPLE CURRENT

FREQUENCY	120Hz	1KHz	10KHz	≥100KHz
COEFFICIENT	0.05	0.3	0.7	1



D X L	D+.5 max	L MAX	S	d ± 0.5
8X8	8.0	8.5	3.5	0.6
8X11.5	8.0	12	3.5	0.6
10X12.5	10.0	13	5.0	0.6

VOLTS (DC)	CAP. (µF)	LEAKAGE (µA)	DF (%)	ESR (mΩ)	RIPPLE (A.r.m.s.)	SIZE DXL(mm)
2.5	560	280	8	6	6.1	8x8
						8x11.5
	680	340	8	6	6.1	8x8
						8x11.5
	820	410	8	6	6.1	8x8
						8x11.5
	1000	500		6	6.1	8x11.5
	1200	600		6	6.1	8x11.5
	1500	750		6	7.1	8x11.5
						10x12.5
	2000	1000		6	7.1	10x12.5
	2,500	1,250	10	6	7.1	10x12.5
	2700	1350		6	7.1	10x12.5
	3000	1500		6	7.1	10x12.5
	3300	1650		6	7.1	10x12.5
	3,500	1750	10	6	7.1	10x12.5
4.0	560	224	8	6	6.1	8x8
						8x11.5
	680	544			6.1	8x8
						8x11.5
	820	656	8	6	6.1	8x11.5
						10x12.5
	1,200	960	8	6	6.1	8x11.5
						10x12.5
	1,500	1200	10	6	6.6	10x12.5
	2000	1600		6	6.6	10x12.5
	2,500	2000	10	6	6.6	10x12.5
6.3	180	113.4	10	6	6.1	8x8
						8x11.5
	220	138.6	10	6	6.1	8x8
						8x11.5
	270	170	10	6	6.6	8x8
						8x11.5
	330	207.9	10	6	6.6	8x8
						8x11.5
	390	245.7	10	6	7.1	8x8
						8x11.5

RIPPLE CURRENT @ 105°C 100KHZ

VOLTS (DC)	CAP. (μF)	LEAKAGE (μA)	DF (%)	ESR (mΩ)	RIPPLE (A.r.m.s.)	SIZE DXL(mm)
6.3	470	296.1	10	6	6.1	8x8
						8x11.5
	560	352	8	6	6.1	8x8
						8x11.5
	680	428.4	8	6	6.6	8x11.5
						10x12.5
	820	516.6	10	6	6.6	8x11.5
						10x12.5
	1000	630	10	6	7.1	8x11.5
						10x12.5
	1200	756	10	6	7.1	8x11.5
						10x12.5
	1500	945	10	6	7.1	10x12.5
	2000	1260	10	6	7.1	10x12.5
10	180	180	8	6	6.6	8x11.5
	220	220	8	6	6.6	8x11.5
	270	270	8	6	6.6	8x11.5
	330	330	8	6	6.6	8x11.5
	390	390	8	6	6.6	8x11.5
	470	470	8	6	6.6	8x11.5
						10x12.5
	560	560	8	6	6.6	8x11.5
						10x12.5
	680	680	10	6	6.6	8x11.5
						10x12.5
	820	820	10	6	7.1	10x12.5
	1000	1000	10	6	7.1	10x12.5
	1200	1200	10	6	7.1	10x12.5

RIPPLE CURRENT @ 105°C 100KHZ