

EL Series 105° SMD Ecap



Features:

- Designed for surface mounting on high density circuit board
- Supplied with carrier taping for automatic mounting machine
- Guarantees 2,000 hours at 105°C

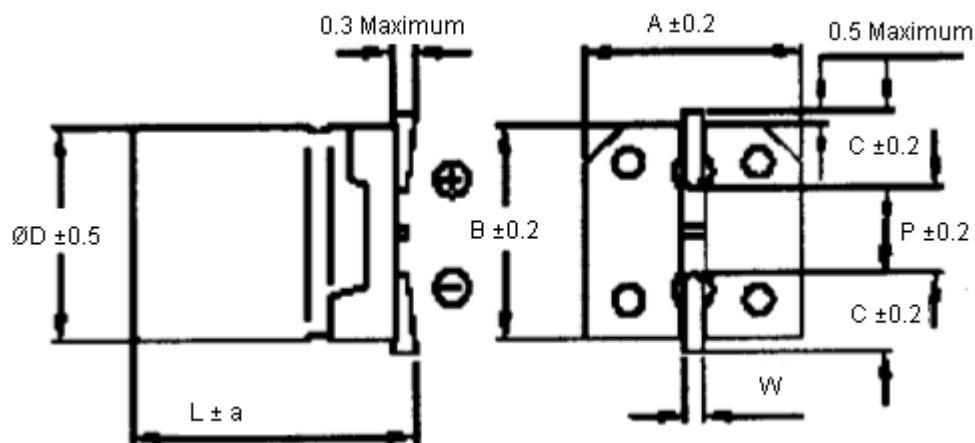
Specification Table

Item	Characteristics						
Operating Temperature Range	-40°C to +105°C						
Working Voltage Range	6.3 to 50 V						
Capacitance Range	0.1 to 1,000 μF						
Capacitance Tolerance	±20% (120 Hz, 20°C)						
Maximum Leakage Current	I ≤0.01 CV or 3 (μA) Whichever is greater (after 2 minute)						
Dissipation Factor at 120 Hz, 20°C	W.V.	6.3	10	16	25	35	50
	Tan δ (Maximum)	0.35	0.3	0.25	0.18	0.16	0.14
Low Temperature Characteristics (Impedance ratio at 120 Hz)	W.V.	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	4	3	2	2	2	2
	Z-40°C / Z+20°C	10	8	6	4	4	4
Load Life After Application of the Rated Voltage for 2,000 Hours at 105°C)	Capacitance change	Within ±25% of initial value					
	Tan δ	Less than 250% of initial specified value					
	Leakage current	Less than specified value					
Shelf Life (at 105°C)	After 1,000 hours no load test, leakage current, capacitance change and tan δ are as same as load life value						
Soldering Heat Resistance	Place terminal side surface on 250°C hot plate for 30 seconds allow test samples be cooled down to room temperature						
	Capacitance change	Within ±10% of initial value					
	Tan δ	Less than Initial specified value					
	Leakage current						

EL Series 105° SMD Ecap



Diagram of Dimensions



Dimensions : Millimetres

ØD ±0.5 Maximum	L	a	A ±0.2	B ±0.2	C ±0.2	W	P ±0.2
4	5.2	0.3	4.3	4.3	1.8	0.5 to 0.8	1
5			5.3	5.3	2.1		1.4
6.3	7.7		6.6	6.6	2.4		2.2
8	10.5	0.5	8.3	8.3	2.9	1.1 to 1.4	3.2
10			10.3	10.3	3.2		4.6

Dimensions : Millimetres

Dimensions and Maximum Permissible Ripple Current mA (rms) at 120 Hz, 105°C

W.V. µF	6.3		10		16		25		35		50	
0.1	-	-	-	-	-	-	-	-	-	-	4 × 5.2	0.7
0.22	-	-	-	-	-	-	-	-	-	-		1.6
0.33	-	-	-	-	-	-	-	-	-	-		2.5
0.47	-	-	-	-	-	-	-	-	-	-		3.5
1	-	-	-	-	-	-	-	-	-	-		7
2.2	-	-	-	-	-	-	-	-	-	-		11
3.3	-	-	-	-	-	-	-	-	-	-	5 × 5.2	13
4.7	-	-	-	-	-	-	4 × 5.2	12	4 × 5.2	14		19
10	-	-	-	-	4 × 5.2	16	5 × 5.2	22	5 × 5.2	24	6.3 × 5.2	32
22	4 × 5.2	20	5 × 5.2	25	5 × 5.2	28	6.3 × 5.2	38	6.3 × 5.2	40	6.3 × 7.7	60
33	5 × 5.2	28		33	6.3 × 5.2	39		52	6.3 × 7.7	77	8 × 10.5	140
47		34	6.3 × 5.2	41		54	6.3 × 7.7	91	8 × 10.5	150		150
100	6.3 × 5.2	66		60	6.3 × 7.7	95	8 × 10.5	150		160	10 × 10.5	220

EL Series 105° SMD Ecap



Dimensions and Maximum Permissible Ripple Current mA (rms) at 120 Hz, 105°C

W.V μF	6.3		10		16		25		35		50	
220	6.3 × 7.7	105	8 × 10.5	175	8 × 10.5	175	8 × 10.5	195	10 × 10.5	290	-	-
330	8 × 10.5	195		195		210	10 × 10.5	290	-	-	-	-
470		210		210	10 × 10.5	290	-	-	-	-	-	-
680	-	-	10 × 10.5	300	-	-	-	-	-	-	-	-
1,000	10 × 10.5	300	-	-	-	-	-	-	-	-	-	-

Part Number Table

Description	Part Number
Capacitor, Case B, 22 UF, 6.3 V	MCEEL6V3226M4X5.2
Capacitor, Case D, 33 UF, 6.3 V	MCEEL6V3336M5X5.2
Capacitor, Case D, 47 UF, 6.3 V	MCEEL6V3476M5X5.2
Capacitor, Case G, 220 UF, 6.3 V	MCEEL6V3227M6.3X7.7
Capacitor, Case H, 330 UF, 6.3 V	MCEEL6V3337M8X10.5
Capacitor, Case H, 470 UF, 6.3 V	MCEEL6V3477M8X10.5
Capacitor, Case J, 1000 UF, 6.3 V	MCEEL6V3108M10X10.5
Capacitor, Case D, 22 UF, 10 V	MCEEL10V226M5X5.2
Capacitor, Case D, 33 UF, 10 V	MCEEL10V336M5X5.2
Capacitor, Case E, 47 UF, 10 V	MCEEL10V476M6.3X5.2
Capacitor, Case E, 100 UF, 10 V	MCEEL10V107M6.3X5.2
Capacitor, Case H, 330 UF, 10 V	MCEEL10V337M8X10.5
Capacitor, Case H, 470 UF, 10 V	MCEEL10V477M8X10.5
Capacitor, Case D, 22 UF, 16 V	MCEEL16V226M5X5.2
Capacitor, Case E, 33 UF, 16 V	MCEEL16V336M6.3X5.2
Capacitor, Case G, 100 UF, 16 V	MCEEL16V107M6.3X7.7
Capacitor, Case H, 220 UF, 16 V	MCEEL16V227M8X10.5
Capacitor, Case H, 330 UF, 16 V	MCEEL16V337M8X10.5
Capacitor, Case J, 470 UF, 16 V	MCEEL16V477M10X10.5
Capacitor, Case B, 4.7 UF, 25 V	MCEEL25V475M4X5.2
Capacitor, Case D, 10 UF, 25 V	MCEEL25V106M5X5.2
Capacitor, Case E, 22 UF, 25 V	MCEEL25V226M6.3X5.2
Capacitor, Case E, 33 UF, 25 V	MCEEL25V336M6.3X5.2
Capacitor, Case G, 47 UF, 25 V	MCEEL25V476M6.3X7.7

Description	Part Number
Capacitor, Case H, 220 UF, 25 V	MCEEL25V227M8X10.5
Capacitor, Case J, 330 UF, 25 V	MCEEL25V337M10X10.5
Capacitor, Case D, 10 UF, 35 V	MCEEL35V106M5X5.2
Capacitor, Case G, 33 UF, 35 V	MCEEL35V336M6.3X7.7
Capacitor, Case H, 47 UF, 35 V	MCEEL35V476M8X10.5
Capacitor, Case H, 100 UF, 35 V	MCEEL35V107M8X10.5
Capacitor, Case J, 220 UF, 35 V	MCEEL35V227M10X10.5
Capacitor, Case B, 2.2 UF, 50 V	MCEEL50V225M4X5.2
Capacitor, Case B, 3.3 UF, 50 V	MCEEL50V335M4X5.2
Capacitor, Case G, 22 UF, 50 V	MCEEL50V226M6.3X7.7
Capacitor, Case H, 33 UF, 50 V	MCEEL50V336M8X10.5
Capacitor, Case E, 100 UF, 6.3 V	MCEEL6V3107M6.3X5.2
Capacitor, Case H, 220 UF, 10 V	MCEEL10V227M8X10.5
Capacitor, Case B, 10 UF, 16 V	MCEEL16V106M4X5.2
Capacitor, Case E, 47 UF, 16 V	MCEEL16V476M6.3X5.2
Capacitor, Case H, 100 UF, 25 V	MCEEL25V107M8X10.5
Capacitor, Case B, 4.7 UF, 35 V	MCEEL35V475M4X5.2
Capacitor, Case E, 22 UF, 35 V	MCEEL35V226M6.3X5.2
Capacitor, Case B, 1 UF, 50 V	MCEEL50V105M4X5.2
Capacitor, Case D, 4.7 UF, 50 V	MCEEL50V475M5X5.2
Capacitor, Case E, 10 UF, 50 V	MCEEL50V106M6.3X5.2
Capacitor, Case H, 47 UF, 50 V	MCEEL50V476M8X10.5
Capacitor, Case J, 100 UF, 50 V	MCEEL50V107M10X10.5

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.