

# EL Series 105° SMD Ecap



## Features:

- Designed for surface mounting on high density circuit board.
- Supplied with carrier taping for automatic mounting machine.
- Guarantees 2000 hours at 105°C.

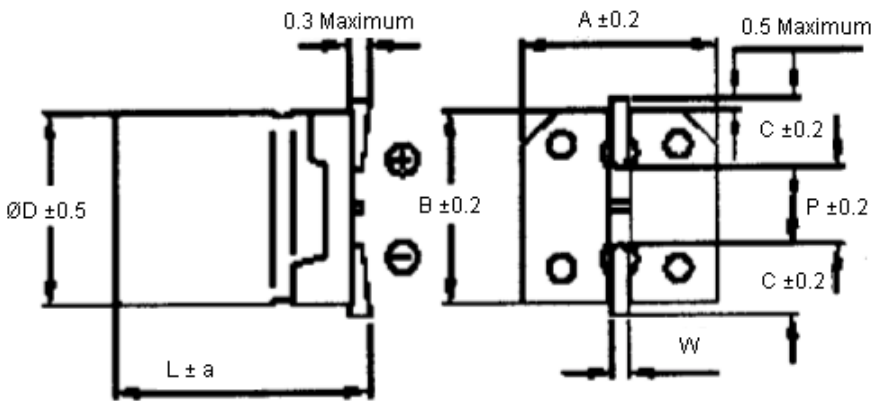
## Specifications

Item	Characteristics						
Operating temperature range	-40°C to +105°C						
Working voltage range	6.3 to 50V						
Capacitance range	0.1 to 1000µF						
Capacitance tolerance	±20% (120 Hz, 20°C)						
Maximum leakage current	I ≤ 0.01 CV or 3 (µA) whichever is greater (after 2 min).						
Dissipation factor at 120Hz, 20°C	W.V.	6.3	10	16	25	35	50
	tan δ (max)	0.35	0.30	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 2000 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 1000 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 to 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	1.0
5			5.3	5.3	2.1		1.4
6.3			7.7	6.6	6.6		2.4
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

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

# EL Series 105° SMD Ecap



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

μF	W.V.		6.3		10		16		25		35		50	
	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.	W.V.
220	6.3 x 7.7	105	8 x 10.5	175	8 x 10.5	175	8 x 10.5	195	10 x 10.5	290	-	-	-	-
330	8 x 10.5	195		195		210	10 x 10.5	290	-	-	-	-	-	-
470		210		210		10 x 10.5	290	-	-	-	-	-	-	-
680	-	-	10 x 10.5	300	-	-	-	-	-	-	-	-	-	
1000	10 x 10.5	300	-	-	-	-	-	-	-	-	-	-	-	

## Part Number Table

Description	Part Number
CAPACITOR, CASE B, 22uF, 6.3V	MCEEL6V3226M4X5.2
CAPACITOR, CASE D, 33uF, 6.3V	MCEEL6V3336M5X5.2
CAPACITOR, CASE D, 47uF, 6.3V	MCEEL6V3476M5X5.2
CAPACITOR, CASE E, 100UF, 6.3V	MCEEL6V3107M6.3X5.2
CAPACITOR, CASE G, 220uF, 6.3V	MCEEL6V3227M6.3X7.7
CAPACITOR, CASE H, 330uF, 6.3V	MCEEL6V3337M8X10.5
CAPACITOR, CASE H, 470uF, 6.3V	MCEEL6V3477M8X10.5
CAPACITOR, CASE J, 1000uF, 6.3V	MCEEL6V3108M10X10.5
CAPACITOR, CASE D, 22uF, 10V	MCEEL10V226M5X5.2
CAPACITOR, CASE D, 33uF, 10V	MCEEL10V336M5X5.2
CAPACITOR, CASE E, 47uF, 10V	MCEEL10V476M6.3X5.2
CAPACITOR, CASE E, 100UF, 10V	MCEEL10V107M6.3X5.2
CAPACITOR, CASE H, 220UF, 10V	MCEEL10V227M8X10.5
CAPACITOR, CASE H, 330uF, 10V	MCEEL10V337M8X10.5
CAPACITOR, CASE H, 470uF, 10V	MCEEL10V477M8X10.5
CAPACITOR, CASE B, 10UF, 16V	MCEEL16V106M4X5.2
CAPACITOR, CASE D, 22uF, 16V	MCEEL16V226M5X5.2
CAPACITOR, CASE E, 33uF, 16V	MCEEL16V336M6.3X5.2
CAPACITOR, CASE E, 47UF, 16V	MCEEL16V476M6.3X5.2
CAPACITOR, CASE G, 100UF, 16V	MCEEL16V107M6.3X7.7
CAPACITOR, CASE H, 220UF, 16V	MCEEL16V227M8X10.5
CAPACITOR, CASE H, 330uF, 16V	MCEEL16V337M8X10.5
CAPACITOR, CASE J, 470uF, 16V	MCEEL16V477M10X10.5
CAPACITOR, CASE B, 4.7UF, 25V	MCEEL25V475M4X5.2
CAPACITOR, CASE D, 10UF, 25V	MCEEL25V106M5X5.2
CAPACITOR, CASE E, 22uF, 25V	MCEEL25V226M6.3X5.2
CAPACITOR, CASE E, 33uF, 25V	MCEEL25V336M6.3X5.2
CAPACITOR, CASE G, 47UF, 25V	MCEEL25V476M6.3X7.7
CAPACITOR, CASE H, 100UF, 25V	MCEEL25V107M8X10.5
CAPACITOR, CASE H, 220UF, 25V	MCEEL25V227M8X10.5
CAPACITOR, CASE J, 330uF, 25V	MCEEL25V337M10X10.5
CAPACITOR, CASE B, 4.7UF, 35V	MCEEL35V475M4X5.2
CAPACITOR, CASE D, 10UF, 35V	MCEEL35V106M5X5.2
CAPACITOR, CASE E, 22UF, 35V	MCEEL35V226M6.3X5.2
CAPACITOR, CASE G, 33uF, 35V	MCEEL35V336M6.3X7.7
CAPACITOR, CASE H, 47UF, 35V	MCEEL35V476M8X10.5
CAPACITOR, CASE H, 100UF, 35V	MCEEL35V107M8X10.5
CAPACITOR, CASE J, 220UF, 35V	MCEEL35V227M10X10.5
CAPACITOR, CASE B, 1UF, 50V	MCEEL50V105M4X5.2
CAPACITOR, CASE B, 2.2uF, 50V	MCEEL50V225M4X5.2
CAPACITOR, CASE B, 3.3uF, 50V	MCEEL50V335M4X5.2
CAPACITOR, CASE D, 4.7UF, 50V	MCEEL50V475M5X5.2
CAPACITOR, CASE E, 10UF, 50V	MCEEL50V106M6.3X5.2
CAPACITOR, CASE G, 22uF, 50V	MCEEL50V226M6.3X7.7
CAPACITOR, CASE H, 33uF, 50V	MCEEL50V336M8X10.5
CAPACITOR, CASE H, 47UF, 50V	MCEEL50V476M8X10.5
CAPACITOR, CASE J, 100UF, 50V	MCEEL50V107M10X10.5

**Disclaimer** This data sheet and its contents (the "Information") belong to the Premier Farnell Group (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. SPC Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.

<http://www.farnell.com>  
<http://www.newark.com>  
<http://www.cpc.co.uk>

