HPM Series

Jianghai

- Miniaturized Solid Aluminium Electrolytic Capacitor with Conductive Polymer
- Ultra ESR
- High Ripple Current
- Switchmode Power Supplies, Computer, DC/DC Converter
- Noise Suppression in Smoothing / High-Frequency Circuits

Item	Characteristics
Operating Temperature Range (°C)	-55 ~ +105
Voltage Range (V)	2,5 ~ 6,3
Capacitance Range (μF)	560 ~ 1500
Capacitance Tolerance (20°C, 120Hz)	± 20%
Surge Voltage	Rated Voltage x 1,15
Leakage Current (μA)	The initial specified value or less (20°C, 2min)
Dissipation Factor (20°C, 120Hz)	The initial specified value or less
Equivalent Series Resistance (20°C, 100kHz)	The initial specified value or less
Temperature Characteristics	Z (+105°C) / Z (+20°C) ≥ 0,75 Stability at 100kHz
	Z (-55°C) / Z (+20°C) ≤ 1,25 Stability at 100kHz
Load Life	**2000h, Rated voltage applied at 105°C** Capacitance change: within ± 20% of the initial measured value Dissipation Factor Tan δ : ≤150% of initial specified value ESR: ≤150% of initial specified value DC Leakage Current: ≤ the initial specified value
Moisture Resistance	**500h, Rated Voltage applied at 60°C, 90~95% RH** Capacitance change: within ± 20% of the initial measured value Dissipation Factor Tan δ : ≤150% of initial specified value ESR: ≤150% of initial specified value DC Leakage Current: ≤ the initial specified value
Surge Voltage Characteristics	**1000 cycles at 105°C, with U_{DC} = 1,15 U_R (30sec load / 330sec discharge)** Capacitance change: within ± 20% of the initial measured value Dissipation Factor Tan δ : ≤150% of initial specified value ESR: ≤150% of initial specified value DC Leakage Current: ≤ the initial specified value

Polymer

Ratings for **HPM** Series

V_{DC} Code	Rated Capacitance	Max ESR 20°C, 100kHz	Max Ripple Current 105°C, 100kHz	Dissipation Factor 20°C, 120Hz	Leakage Current	Size Ø D x L
(V)	(μF)	(mΩ)	(mArms)	-	(μA)	(mm)
2,5 0E	560	7	4400	0,12	500	8 x 8
	820	7	5600	0,12	513	8 x 8
	1000	7	5600	0,12	625	8 x 8
	1500	7	5600	0,12	750	8 x 8
4 0G	560	7	5600	0,12	560	8 x 8
	820	7	5600	0,12	820	8 x 8
6,3 0J	680	7	5600	0,12	857	8 x 8

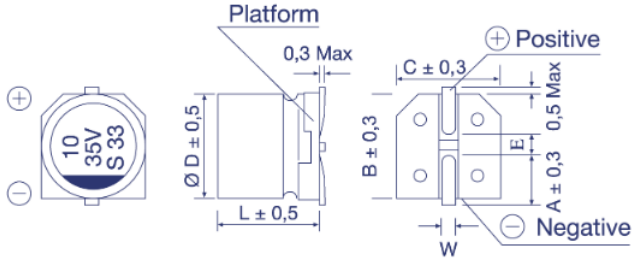
Part Number System

Order Code **SMD, Radial, Snap-In**

EC	R	1C	PT	101	M	FF	25	0611	JExxxxx
Technology	Terminal Type	Rated Voltage Code	Series Code	Capacitance Code (in µF)	Capacitance Tolerance	Lead Form	Terminal/ Pitch Size	Dimension	for Specials only
EC = Electrolytic Capacitor	SMD = V	For coding please refer to the pages of ratings	CD **VS** = BS	0,47 = R47	**±20%** = M	SMD:		4x7 = 0407	
PC = Polymer Capacitor	Radial = R		CD **VH** = VH	1,0 = 010	±10% = K	**Taped** = FF	Terminal = T2	5x11,5 = 0511	
	Snap-In = S		CD **VZ** = VZ	2,2 = 2R2	+30 / -10% = Q	Radial:		6,3x11,5 = 0611	
			CD **261** = LK	100 = 101	+50 / -10% = T	**Long Lead** = LL	2,0mm = 20	35x80 = 3580	
			CD **261X** = QX	1000 = 102		Cut 5,0mm = CB	2,5mm = 25	45x100 = 45100	
			CD **262** = QM	10000 = 103		**Cut 4,5mm** = CC	3,5mm = 35		
			CD **263** = BK			Cut 4,0mm = CD	5,0mm = 50		
			CD **269** = PH			Cut 3,5mm = CE	7,5mm = 75		
			CD **281** = LL			Cut 3,0mm = CF	10,0mm = 10		
			CD **284** = XY			on request: alternative lead forms (axial, 90° - angle, others)	12,5mm = 12		
			CD **287** = GC						
			CD **28L** = QL			Snap-In:			
			CD **293** = BZ			4,0mm Pin Length = T4	2 Pin = P2		
			CD **294** = BW			**6,3mm Pin Length** = T6	3 Pin = P3		
			CD **295** = BC			Soldering Pin = S4	4 Pin = P4		
			CD **296** = KC				5 Pin = P5		
			CD **297** = BB			**preferred**			
			CD **299** = PG						
			CD **29D** = HR						
			CD **29H** = QH						
			CD **29L** = QL						
			HCP = CP						
			HPM = PM						
			HVC = VC						

Technical Specification **SMD Type**

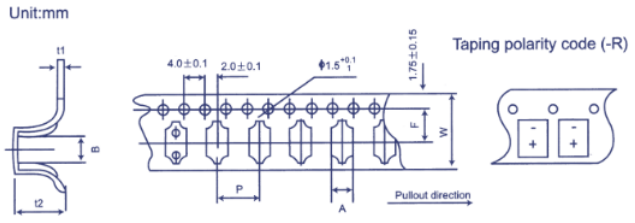
Dimensions



Ø DxL	4x5,4	5x5,4	6,3x5,4	6,3x7,7	8x10,5	8x11,8	10x10,5	10x12,7
A	1,8	2,1	2,4	2,5	2,9	2,9	3,2	3,2
B	4,3	5,3	6,6	6,6	8,3	8,4	10,3	10,4
C	4,3	5,3	6,6	6,6	8,3	8,4	10,3	10,4
E	1,0	1,3	2,2	2,2	3,1	3,1	4,5	4,5
L	5,4	5,4	5,4	7,7	10,5	11,8	10,5	12,7
W	0,5 - 0,8				0,7 - 1,1			

in mm

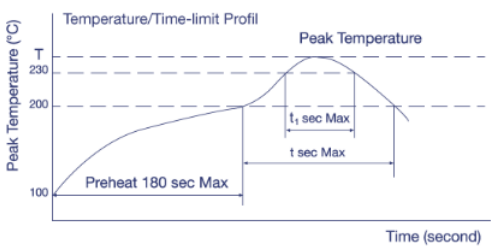
Taping Dimensions



Size (DxL)	w ± 0,3	A ± 0,2	B ± 0,2	P ± 0,1	t2 ± 0,2	F ± 0,1	t1 ± 0,1
4 x 5,4	12,0	5,0	5,0	8,0	5,8	5,5	0,4
5 x 5,4	12,0	6,0	6,0	12,0	5,8	5,5	0,4
6,3 x 5,4	16,0	7,0	7,0	12,0	5,8	7,5	0,4
6,3 x 7,7	16,0	7,0	7,0	12,0	8,4	7,5	0,4
8 x 10,5	24,0	8,7	8,7	16,0	11,0	11,5	0,5
8 x 11,8	24,0	8,7	8,7	16,0	12,3	11,5	0,5
10 x 10,5	24,0	10,7	10,7	16,0	11,0	11,5	0,5
10 x 12,7	24,0	10,7	10,7	16,0	14,0	11,5	0,5

in mm

Soldering Profile (Aluminium Electrolytic Capacitors)

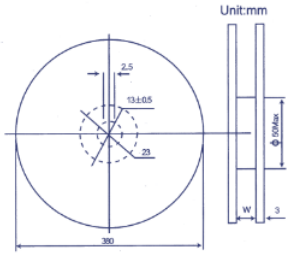


Allowable Range of Peak Temperature

Size	T (°C)	t (second)	t1 (second)

Diameter	w	D
4; 5	14 ± 1	50 ± 1
6,3	18 ± 1	50 ± 1
8; 10	25 ± 1	50 ± 1
Polymer	25 ± 1	80 ± 1

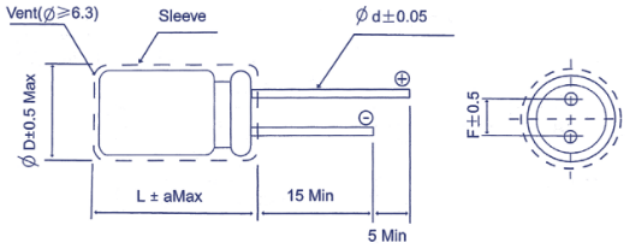
in mm



Part Number System

Technical Specification **Radial Type**

Dimensions for loose, long-lead type, (bulk)
Order Code: LL

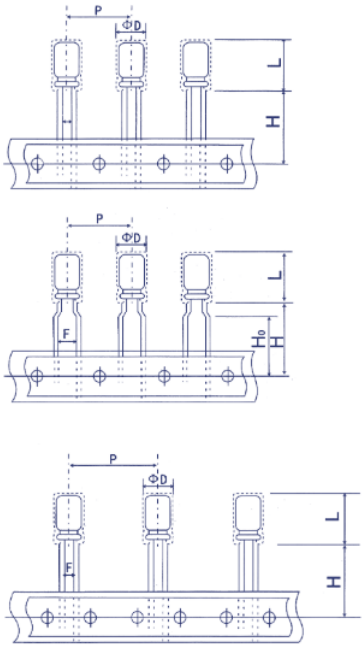


L	L ≤ 7					L ≥ 11								
Ø D	3	4	5	6,3	8	5	6,3	8	10	12,5	16	18	20	22	25
F	1	1,5	2,0	2,5	3,5	2,0	2,5	3,5	5,0		7,5		10,0		12,5
Ø d	0,4	0,45				0,5		0,6			0,8		1,0		
a_{Max}	1,0					2,0									

in mm

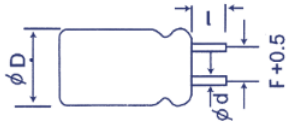
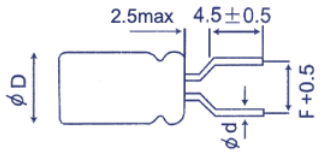
Dimensions for Ammopack taping
Order Code: FF (FD)

Code	Case Range		Dimensions				Form	Ammopack
	Ø D	L (max)	H ± 0,75	Ho ± 0,5	F ± 0,5	P ± 0,1		
FF	4 ~ 6	13	18,5	-	2,5	12,7	A	Form A
	8	13	18,5	-	3,5	12,7		
	4 ~ 8	7	17,5	16	5	12,7	B	Form B
	5 ~ 6,3	13	18,5					
	8	22	20,0					
	10	22	18,5	-			A	
	12,5	27	18,5	-		15,0		Form C
FD	12,5	27	18,5	-		25,4	C	
FF	16 ~ 18	27	18,5	-	7,5	30,0		



in mm

Dimensions for loose, short cut leads, (bulk)
Order Code: CC (CB,CD,CE,CF)

Straight Lead	Bended Lead
	

Code	CB	CC	CD	CE	CF
l	5,0 ± 0,5	4,5 ± 0,5	4,0 ± 0,5	3,5 ± 0,5	3,0 ± 0,5

preferred

in mm