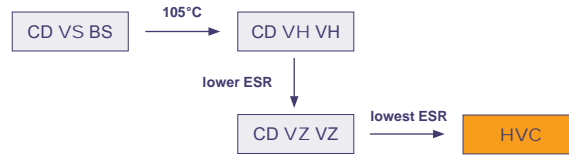
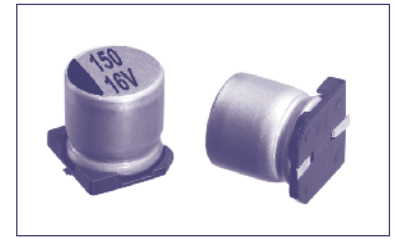


- Solid Aluminium Electrolytic Capacitor with Conductive Polymer
- Very low ESR
- High Ripple Current
- Switchmode Power Supplies, Computer, DC/DC Converter
- Noise Suppression in Smoothing / High-Frequency Circuits



Item	Characteristics
Operating Temperature Range (°C)	-55 ~ +105
Voltage Range (V)	2,5 ~ 16
Capacitance Range (µF)	100 ~ 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 ~ 1,0 Stability at 100kHz
	Z (-55°C) / Z (+20°C) : 1,0 ~ 1,25 Stability at 100kHz
Load Life	<b>2000h, Rated voltage applied at 105°C</b> 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	<b>500h, Rated Voltage applied at 60°C, 90~95% RH</b> 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	<b>1000 cycles at 105°C, with U<sub>DC</sub> = 1,15 U<sub>R</sub> ( 30sec load / 330sec discharge)</b> 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

## Ratings for HVC Series

V <sub>DC</sub> 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	680	13	4520	0,18	340	8 x 11,8
	1000	13	5200	0,18	500	10 x 12,7
	1500	12	5440	0,18	750	10 x 12,7
4 0G	560	13	4520	0,18	448	8 x 11,8
	1200	12	5440	0,18	960	10 x 12,7
6,3 0J	470	15	4210	0,15	595	8 x 11,8
	820	12	5440	0,15	1035	10 x 12,7
10 1A	330	17	3950	0,15	660	8 x 11,8
	560	13	5230	0,15	1120	10 x 12,7

Custom products are available on request.

## Order Code SMD, Radial, Snap-In

EC	R	1C	PT	101	M	FF	25	O611	JE xxxxx
Technology	Terminal Type	Rated Voltage Code	Series Code	Capacitance Code (in $\mu\text{F}$ )	Capacitance Tolerance	Lead Form	Terminal/Pitch Size	Dimension	for Specials only
EC = Electrolytic Capacitor	SMD = V Radial = R	For coding please refer to the pages of ratings	CD VS = BS	0,47 = R47	$\pm 20\%$ = M	SMD:		4x7 = 0407	
			CD VH = VH	1,0 = 010	$\pm 10\%$ = K	Taped = FF	Terminal = T2	5x11,5 = 0511	
PC = Polymer Capacitor	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)			
			CD 287 = GC				12,5mm = 12		
			CD 28L = QL						
			CD 293 = BZ						
			CD 294 = BW						
			CD 295 = BC						
			CD 296 = KC						
			CD 297 = BB						
			CD 299 = PG						
			CD 29D = HR						
			CD 29H = QH						
			CD 29L = QL						
			HCP = CP						
			HPM = PM						
			HVC = VC						

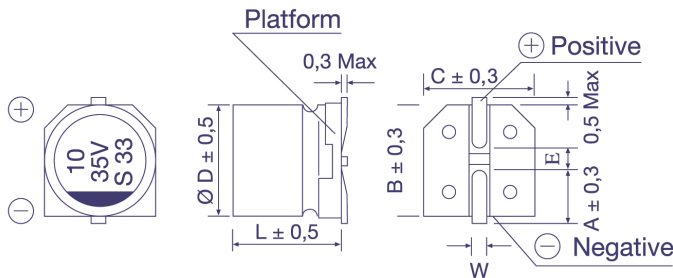
  

Snap-In:	
4,0mm Pin Length = T4	2 Pin = P2
6,3mm Pin Length = T6	3 Pin = P3
Soldering Pin = S4	4 Pin = P4
	5 Pin = P5

preferred

## Technical Specification SMD Type

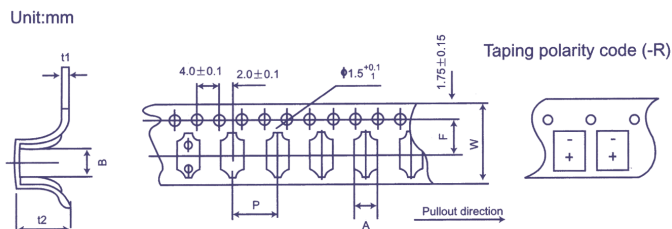
### Dimensions



Ø D x L	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

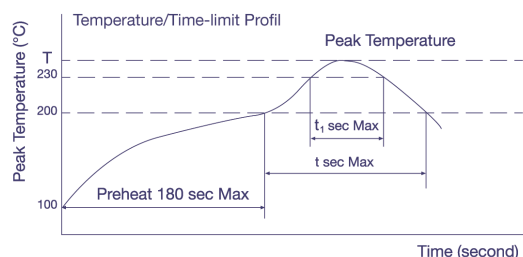
### Taping Dimensions



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)

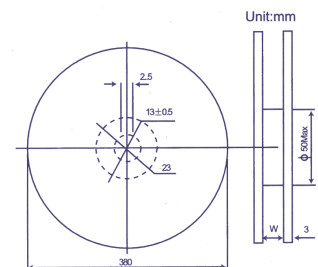


### Allowable Range of Peak Temperature

Size	T (°C)	t (second)	t <sub>1</sub> (second)
Ø 4 ~ 6,3	250	90	40
Ø 8 x 10,5	240	90	30
Ø 10 x 10,5	235	60	30

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



For more details or Soldering Profiles of Radials or Polymer-Capacitors please contact our local Sales Offices.