

ANPS

Constructed of polypropylene film and metal foil or metallized film and metal foil with axial leads of tinned wire

■ Features

- Self-healing
- Encapsulated in a polyester tape wrapping case with thermosetting resin material
- RoHS Compliant and lead-free terminations

■ Applications

- Typical applications include switching spikes suppression and resonant capacitors in switched mode power supply(SMPS)
- Deflection circuits in televisions (S-correction and flyback tuning)

■ Specifications

Reference Standard		IEC 60384-13	
Climatic Category		55/105/56	
Rated Temperature		+85°C	
		Above +85°C DC and AC voltage derating is 1.25%/°C	
Operation Temperature Range		-55°C to +105°C	
Rated Voltage	DC-TYPE	100~2000V	
	AC-TYPE	63~500V	
Capacitance Range (μF)		0.000047 – 0.33 μF	
Capacitance Tolerance		±5%, ±10%, ±20%	
Dissipation Factor		Frequency	C ≤ 0.1 μF C ≥ 0.1 μF
		10 kHz	0.05% 0.05%
		100 kHz	0.10% -
Insulation Resistance		VR<100Vdc ≥ 100,000 MΩ (≥ 500,000 MΩ) 100 VDC 60SEC+25°C VR≥500Vdc ≥ 100,000 MΩ (≥ 500,000 MΩ) 500 VDC 60SEC+25°C	

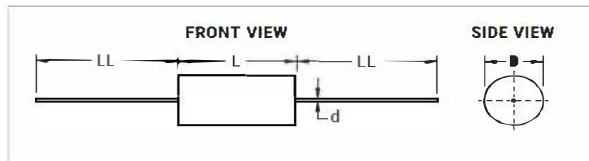
■ Part Number System

ANPS	160V	470	J	11	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-ANPS
 Part-2 : Rated Voltage(160~630VDC)
 Part-3 : Rated Capacitance Value(0.000047 μF – 0.33 μF / 470~334)
 Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
 Part-5 : Length (11mm / 14mm / 20.5mm / 28mm / 33mm)
 Part-6 : Forming-Type and Packing Code
 Part-7 : Size Number (5~6 : Min-Type / 7 : Standard-Type / 8~15 : Large-Type)
 Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc (63Vac)						
Cap. (μ F)	Dimensions(Max)			dV/dt		PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)	
0.0047	5.0	11.0	0.5	3000	600000	ANPS 100V472J11S5_
0.0068	5.0	11.0	0.5	3000	600000	ANPS 100V682J11S5_
0.01	5.0	11.0	0.5	3000	600000	ANPS 100V103J11S5_

400Vdc (160Vac)						
Cap. (μ F)	Dimensions(Max)			dV/dt		PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)	
0.000047	5.0	11.0	0.5	13000	10,400,000	ANPS 400V470J11S5_
0.000068	5.0	11.0	0.5	13000	10400000	ANPS 400V680J11S5_
0.0001	5.0	11.0	0.5	13000	10400000	ANPS 400V101J11S5_
0.00015	5.0	11.0	0.5	13000	10400000	ANPS 400V151J11S5_
0.00022	5.0	11.0	0.5	13000	10400000	ANPS 400V221J11S5_
0.00033	5.0	11.0	0.5	13000	10400000	ANPS 400V331J11S5_
0.00047	5.0	11.0	0.5	13000	10400000	ANPS 400V471J11S5_
0.00068	5.0	11.0	0.5	13000	10400000	ANPS 400V681J11S5_
0.001	5.0	11.0	0.5	13000	10400000	ANPS 400V102J11S5_
0.0015	5.0	11.0	0.5	13000	10400000	ANPS 400V152J11S5_
0.0022	6.5	16.5	0.6	6500	5200000	ANPS 400V222J16.5S5_
0.0033	6.5	16.5	0.6	6500	5200000	ANPS 400V332J16.5S5_
0.0047	7.0	16.5	0.6	6500	5200000	ANPS 400V472J16.5S5_
0.0068	8.0	16.5	0.8	6500	5200000	ANPS 400V682J16.5S5_
0.01	9.0	16.5	0.8	6500	5200000	ANPS 400V103J16.5S5_

250Vdc (125Vac)						
Cap. (μ F)	Dimensions(Max)			dV/dt		PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)	
0.0022	5.0	11.0	0.5	5000	2500000	ANPS 250V222J11S5_
0.0033	5.0	11.0	0.5	5000	2500000	ANPS 250V332J11S5_
0.0047	7.0	16.5	0.6	4500	2250000	ANPS 250V472J16.5S5_
0.0068	7.0	16.5	0.6	4500	2250000	ANPS 250V682J16.5S5_
0.01	7.5	16.5	0.6	4500	2250000	ANPS 250V103J16.5S5_
0.015	8.5	16.5	0.8	4500	2250000	ANPS 250V153J16.5S5_

630Vdc (300Vac)						
Cap. (μ F)	Dimensions(Max)			dV/dt		PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)	
0.015	8.5	20.5	0.8	4300	5418000	ANPS 630V153J20.5S5_
0.022	9.5	20.5	0.8	4300	5418000	ANPS 630V223J20.5S5_
0.033	9.0	28.0	0.8	2600	3276000	ANPS 630V333J28S5_
0.047	10.0	28.0	0.8	2600	3276000	ANPS 630V473J28S5_
0.068	11.5	28.0	0.8	2600	3276000	ANPS 630V683J28S5_
0.1	13.5	28.0	0.8	2600	3276000	ANPS 630V104J28S5_

Polypropylene Film/Foil, Axial

1000Vdc (400Vac)

Cap. (μ F)	Dimensions(Max)			dV/dt		Max K0	PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)		
0.0033	8.5	20.5	0.8	14000	28000000		ANPS 1000V332J20.5S5_
0.0047	9.5	20.5	0.8	14000	28000000		ANPS 1000V472J20.5S5_
0.0068	8.0	28.0	0.8	5000	10000000		ANPS 1000V682J28S5_
0.01	8.5	28.0	0.8	5000	10000000		ANPS 1000V103J28S5_
0.015	10.0	28.0	0.8	5000	10000000		ANPS 1000V153J28S5_
0.022	11.0	28.0	0.8	5000	10000000		ANPS 1000V223J28S5_
0.033	13.0	28.0	0.8	5000	10000000		ANPS 1000V333J28S5_
0.047	14.0	33.0	0.8	3700	7400000		ANPS 1000V473J33S5_

1500Vdc (450Vac)

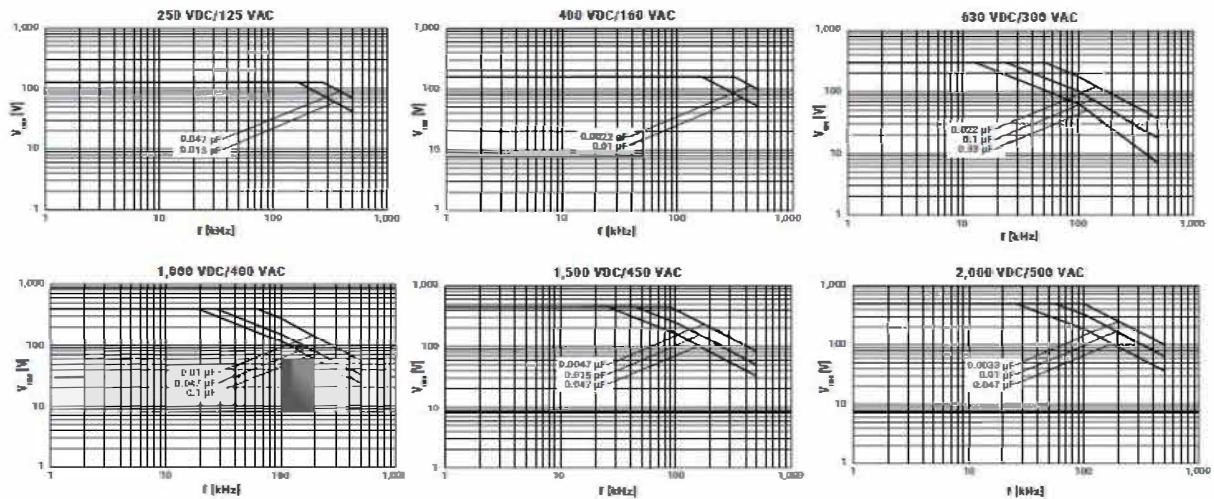
Cap. (μ F)	Dimensions(Max)			dV/dt		Max K0	PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)		
0.0022	8.0	20.5	0.8	17000	51000000		ANPS 1500V222J20.5S5_
0.0033	9.5	20.5	0.8	17000	51000000		ANPS 1500V332J20.5S5_
0.0047	8.5	28.0	0.8	6000	18000000		ANPS 1500V472J28S5_
0.0068	8.5	28.0	0.8	6000	18000000		ANPS 1500V682J28S5_
0.01	9.5	28.0	0.8	6000	18000000		ANPS 1500V103J28S5_
0.015	11.0	28.0	0.8	6000	18000000		ANPS 1500V153J28S5_
0.022	12.5	28.0	0.8	6000	18000000		ANPS 1500V223J28S5_
0.033	13.5	33.0	0.8	4500	13,500,000		ANPS 1500V333J33S5_

2000Vdc (500Vac)

Cap. (μ F)	Dimensions(Max)			dV/dt		Max K0	PART NUMBER
	D	L	d	(V/ μ s)	(V2/ μ s)		
0.001	8.5	20.5	0.8	27000	108,000,000		ANPS 2000V102J20.5S5_
0.0015	9.5	20.5	0.8	27000	108,000,000		ANPS 2000V152J20.5S5_
0.0022	11.0	20.5	0.8	27000	108,000,000		ANPS 2000V222J20.5S5_
0.0033	9.0	28.0	0.8	9800	39,200,000		ANPS 2000V332J28S5_
0.0047	9.5	28.0	0.8	9800	39,200,000		ANPS 2000V472J28S5_
0.0068	11.0	28.0	0.8	9800	39,200,000		ANPS 2000V682J28S5_
0.01	13.0	28.0	0.8	9800	39,200,000		ANPS 2000V103J28S5_
0.015	13.5	33.0	0.8	7000	28,000,000		ANPS 2000V153J33S5_

■ Electrical Characteristics (Typical Data)

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/ $T_h \leq 40^\circ\text{C}$)



Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T_h \leq 40^\circ\text{C}$)

