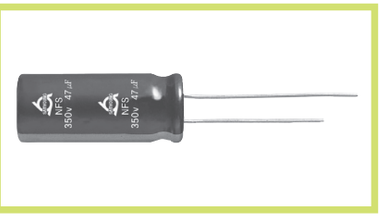
NFS Series

• 105℃ 5,000Hrs assured.

- Non-solvent proof.
- High Ripple, Long Life.
- For SMPS, IP-Board, Adaptor.
- RoHS compliant.
- Halogen-free capacitors are also available.

NFK → NFS

High Ripple

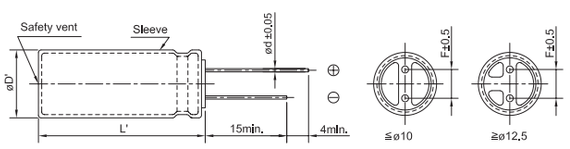


SPECIFICATIONS

Item	Characteristics	
Rated Voltage Range	200～400 V_{DC}	420～500 V_{DC}
Operating Temperature Range	-40～+105℃	-25～+105℃
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)	
Leakage Current	C·V \ Time: After 1 minute / After 5 minutes ≦ 1000: I=0.1CV+40 / I=0.03CV+15 〉1000: I=0.04CV+100 / I=0.02CV+25 Where, I:Max. Leakage current(μA) C:Nominal capacitance(μF) V:Rated voltage(V_{DC}) (at 20℃)	
Dissipation Factor(Tanδ)	Rated Voltage(V_{DC}): 200～250 / 350～500 Tanδ(Max.): 0.20 / 0.24 (at 20℃, 120Hz)	
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V_{DC}): 200～250 / 350～400 / 420～500 Z(-25℃)/Z(20℃): 3 / 5 / 6 Z(-40℃)/Z(20℃): 6 / 6 / - (at 120Hz)	
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105℃. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ 500% of the initial specified value	
Others	Satisfied characteristics KS C IEC 60384-4	

DIMENSIONS OF NFS Series

Unit(mm)



Marking : DARK BROWN SLEEVE, SILVER INK

øD	8	10	12.5	16	18
ød	0.6	0.6	0.6	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5
øD'	øD+0.5 max.				
L'	L+1.5max.	L+2.0 max.			

※ ø10 x 12L, L'≦ L+1.5

RATINGS OF NFS Series

VDC	Cap.(μF)	Case size ø D×L(mm)	Rated Ripple Current(mArms/105℃)				
			120Hz	1kHz	10kHz	50kHz	100kHz
200	22	8×20	120	240	270	285	300
		10×20	184	440	495	523	550
	33	12.5×20	300	560	630	665	700
	47	12.5×20	340	780	878	926	975
	68	12.5×20	369	880	990	1,045	1,100
		12.5×25	436	1,040	1,170	1,235	1,300
	100	12.5×30	550	775	1,395	1,473	1,550
		16×25	600	1,304	1,467	1,549	1,630
250	6.8	10×12	88	189	213	225	280
	10	10×16	165	224	288	304	320
	22	10×20	200	440	495	523	550
	33	12.5×20	250	476	612	646	680
	47	12.5×20	340	720	810	855	900
	68	16×25	540	1,080	1,215	1,283	1,350
	82	12.5×30	510	1,160	1,305	1,378	1,450
350	10	8×20	120	210	270	285	300
		10×20	135	245	315	333	350
	22	12.5×20	225	520	585	618	650
		12.5×25	270	544	612	646	680
	47	18×20	360	920	1,035	1,093	1,150
	68	16×31.5	520	1,120	1,260	1,330	1,400
400	8.2	8×20	105	293	376	397	418
	10	10×20	120	301	387	409	430
	22	12.5×25	250	624	702	741	780
	33	16×25	325	736	828	874	920
420	10	10×16	98	245	315	333	350
	22	12.5×20	215	384	432	456	480
	33	16×20	340	568	639	675	710
	47	18×20	375	600	675	713	750
	56	18×20	400	640	720	760	800
	68	18×25	500	840	945	998	1,050
	82	18×25	560	880	990	1,045	1,100
	100	18×31.5	700	1,136	1,278	1,349	1,420
	120	18×31.5	740	1,160	1,305	1,378	1,450
		18×35.5	760	1,240	1,395	1,473	1,550
	150	18×40	800	1,304	1,467	1,549	1,630
450	22	12.5×25	235	420	473	499	525
	33	16×20	340	568	639	675	710
	47	16×25	375	600	675	713	750
	68	18×25	500	840	945	998	1,050
	82	18×31.5	650	1,092	1,229	1,297	1,365
	100	18×35.5	750	1,260	1,418	1,496	1,575
	120	18×40	800	1,344	1,512	1,596	1,680
500	68	18×35.5	585	983	1,106	1,167	1,229
	82	18×40	653	1,097	1,234	1,303	1,371
	100	18×45	750	1,260	1,418	1,496	1,575