RS8

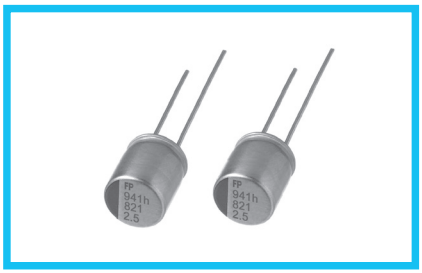
Low ESR / ESL, Low Profile (φ6.3)

HR High Ripple Current | Z Low Impedance | F For High Frequency | L Long Life | Anti-Solvent Feature

FPCAP Expanded

- Low ESR/ESL, High ripple current.
- Low Profile(Height 8mm).
- Load life of 2000/5000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

RL8 (Lower ESL) → RS8 → (Lower ESL) RF8

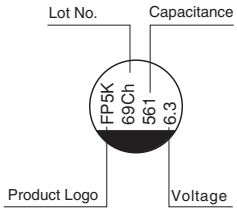


■ Specifications

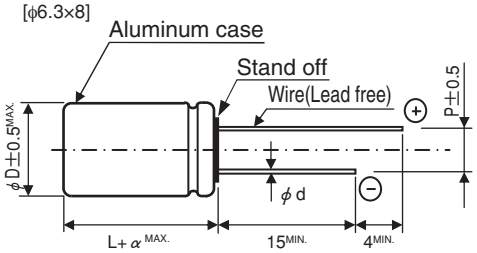
Item	Performance Characteristics	
Category Temperature Range	–55 to +105°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	100 to 1200μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C	
ESR (※1)	Less than or equal to the specified value at 100kHz, 20°C	
Leakage Current (※2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C	
Endurance	Test condition	105°C, rated voltage 2000 / 5000Hrs.
	Capacitance change	Within ±20% of initial value before test
	tan δ	150% or less than the initial specified value
	ESR(※1)	150% or less than the initial specified value
	Leakage current (※2)	Less than or equal to the initial specified value

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

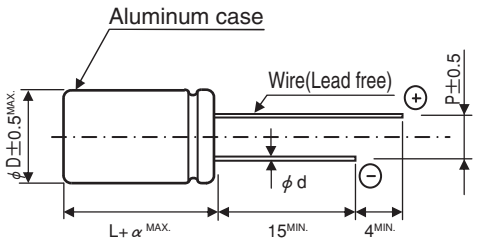
■ Dimensions



[φ6.3×8]



[φ6.3×8(-H or -5KH)]



(mm)

φD×L	φd	P	α
6.3×8	0.6	2.5	1.0

● Frequency coefficient of rated ripple current

Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz
Coefficient	0.10	0.45	0.50	1.00	1.00

Type numbering system (Example : 6.3V 560μF)

Nichicon part number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R	S	8	0	J	5	6	1	M	D	N	A	S	Q	J	T

- 15 16: Lead Forming
- 14: Control code
- 12 13: Configuration
- 10 11: Capacitance tolerance (±20%)
- 7 8 9: Rated capacitance (560μF)
- 4 5: Rated voltage (6.3V)
- 1 2 3: Series name
- 1: Type

FPCAP part number

FP	-	6R3	RE	561	M	-	S8	JT	-	5K

- 5K: Control code
- JT: Lead Forming
- S8: Series name
- M: Capacitance tolerance (±20%)
- 561: Capacitance (560μF)
- RE: Configuration
- 6R3: Voltage(6.3V)
- FP: Type

● Dimension table in next page.

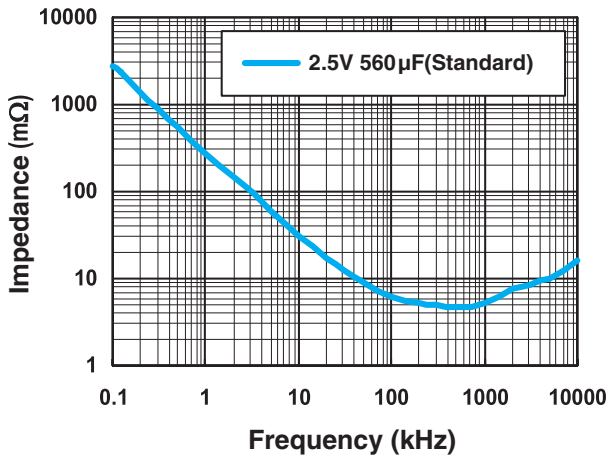
RS8

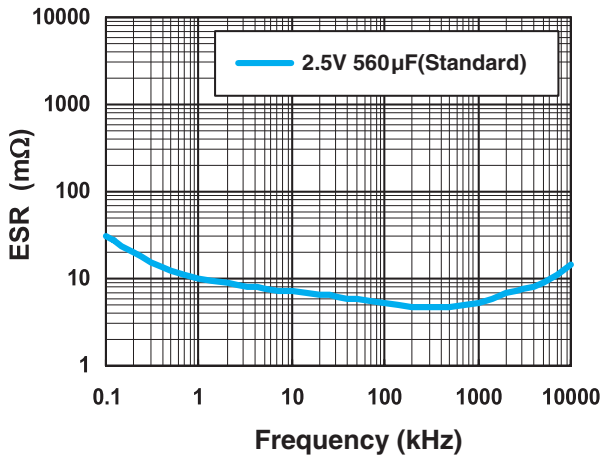
■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	ESL (Typ.) (nH, 40MHz)	Rated Ripple Current (mArms) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	330	6.3×8	0.10	500	7	2	5600	RS80E331MDN1□□	FP-2R5RE331M-S8□□
		330	6.3×8	0.10	500	7	2	5600	RS80E331MCN1□□	FP-2R5RE331M-S8□□-H
		＊330	6.3×8	0.10	500	7	2	5600	RS80E331MDNASQ□□	FP-2R5RE331M-S8□□-5K
		＊330	6.3×8	0.10	500	7	2	5600	RS80E331MCNASQ□□	FP-2R5RE331M-S8□□-5KH
		470	6.3×8	0.10	500	7	2	5600	RS80E471MDN1□□	FP-2R5RE471M-S8□□
		470	6.3×8	0.10	500	7	2	5600	RS80E471MCN1□□	FP-2R5RE471M-S8□□-H
		＊470	6.3×8	0.10	500	7	2	5600	RS80E471MDNASQ□□	FP-2R5RE471M-S8□□-5K
		＊470	6.3×8	0.10	500	7	2	5600	RS80E471MCNASQ□□	FP-2R5RE471M-S8□□-5KH
		560	6.3×8	0.10	500	7	2	5600	RS80E561MDN1□□	FP-2R5RE561M-S8□□
		560	6.3×8	0.10	500	7	2	5600	RS80E561MCN1□□	FP-2R5RE561M-S8□□-H
		＊560	6.3×8	0.10	500	7	2	5600	RS80E561MDNASQ□□	FP-2R5RE561M-S8□□-5K
		＊560	6.3×8	0.10	500	7	2	5600	RS80E561MCNASQ□□	FP-2R5RE561M-S8□□-5KH
		820	6.3×8	0.10	512	7	2	5600	RS80E821MDN1□□	FP-2R5RE821M-S8□□
		820	6.3×8	0.10	512	7	2	5600	RS80E821MCN1□□	FP-2R5RE821M-S8□□-H
		＊820	6.3×8	0.10	512	7	2	5600	RS80E821MDNASQ□□	FP-2R5RE821M-S8□□-5K
		＊820	6.3×8	0.10	512	7	2	5600	RS80E821MCNASQ□□	FP-2R5RE821M-S8□□-5KH
		1200	6.3×8	0.10	750	7	2	5600	RS80E122MDN1□□	FP-2R5RE122M-S8□□
		1200	6.3×8	0.10	750	7	2	5600	RS80E122MCN1□□	FP-2R5RE122M-S8□□-H
4.0 (0G)	4.6	560	6.3×8	0.10	560	7	2	5000	RS80G561MDN1□□	FP-4R0RE561M-S8□□
		560	6.3×8	0.10	560	7	2	5000	RS80G561MCN1□□	FP-4R0RE561M-S8□□-H
		＊560	6.3×8	0.10	560	7	2	5000	RS80G561MDNASQ□□	FP-4R0RE561M-S8□□-5K
		＊560	6.3×8	0.10	560	7	2	5000	RS80G561MCNASQ□□	FP-4R0RE561M-S8□□-5KH
6.3 (0J)	7.2	330	6.3×8	0.10	519	8	2	5000	RS80J331MDN1□□	FP-6R3RE331M-S8□□
		330	6.3×8	0.10	519	8	2	5000	RS80J331MCN1□□	FP-6R3RE331M-S8□□-H
		＊330	6.3×8	0.10	519	8	2	5000	RS80J331MDNASQ□□	FP-6R3RE331M-S8□□-5K
		＊330	6.3×8	0.10	519	8	2	5000	RS80J331MCNASQ□□	FP-6R3RE331M-S8□□-5KH
		470	6.3×8	0.10	740	8	2	5000	RS80J471MDN1□□	FP-6R3RE471M-S8□□
		470	6.3×8	0.10	740	8	2	5000	RS80J471MCN1□□	FP-6R3RE471M-S8□□-H
		＊470	6.3×8	0.10	740	8	2	5000	RS80J471MDNASQ□□	FP-6R3RE471M-S8□□-5K
		＊470	6.3×8	0.10	740	8	2	5000	RS80J471MCNASQ□□	FP-6R3RE471M-S8□□-5KH
		560	6.3×8	0.10	882	8	2	5000	RS80J561MDN1□□	FP-6R3RE561M-S8□□
		560	6.3×8	0.10	882	8	2	5000	RS80J561MCN1□□	FP-6R3RE561M-S8□□-H
		＊560	6.3×8	0.10	882	8	2	5000	RS80J561MDNASQ□□	FP-6R3RE561M-S8□□-5K
		＊560	6.3×8	0.10	882	8	2	5000	RS80J561MCNASQ□□	FP-6R3RE561M-S8□□-5KH
		680	6.3×8	0.10	1071	8	2	4700	RS80J681MDN1□□	FP-6R3RE681M-S8□□
		680	6.3×8	0.10	1071	8	2	4700	RS80J681MCN1□□	FP-6R3RE681M-S8□□-H
		820	6.3×8	0.10	1292	8	2	4700	RS80J821MDN1□□	FP-6R3RE821M-S8□□
		820	6.3×8	0.10	1292	8	2	4700	RS80J821MCN1□□	FP-6R3RE821M-S8□□-H
16 (1C)	18.4	100	6.3×8	0.10	500	14	2	3800	RS81C101MDN1□□	FP-016RE101M-S8□□
		100	6.3×8	0.10	500	14	2	3800	RS81C101MCN1□□	FP-016RE101M-S8□□-H
		270	6.3×8	0.10	1296	15	2	3800	RS81C271MDN1□□	FP-016RE271M-S8□□
		270	6.3×8	0.10	1296	15	2	3800	RS81C271MCN1□□	FP-016RE271M-S8□□-H
		＊270	6.3×8	0.10	1296	15	2	3800	RS81C271MDNASQ□□	FP-016RE271M-S8□□-5K
		＊270	6.3×8	0.10	1296	15	2	3800	RS81C271MCNASQ□□	FP-016RE271M-S8□□-5KH

＊: Load life 5000hours.

■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)





- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.