

**RS8** Low ESR / ESL, Low Profile (φ6.3)



**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).



■ 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



φD×L	φd	P	α
6.3×8	0.6	2.5	1.0

(mm)

● 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



FPCAP part number



# 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 (mA rms) (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
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.