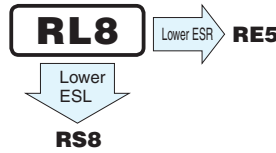


# RL8 Low ESR, Low Profile (φ8)



**FPCAP** *Expanded*

- Ultra Low ESR, 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).



## ■ Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 35V	
Rated Capacitance Range	100 to 1500μF	
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

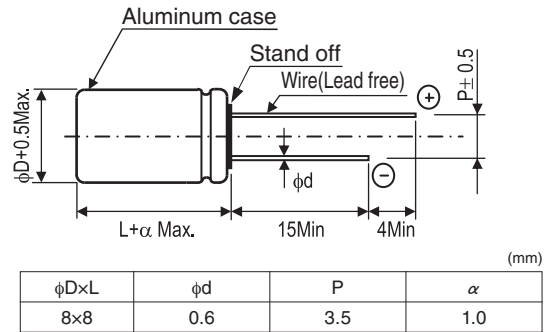
\*1 ESR should be measured at both of the terminal ends closest to the capacitor body.

\*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.

## ■ Size List

[φD×L(mm)]

Cap [μF]	R.V.(V)	2.5	4.0	6.3	16	35
	S.V.(V)	2.8	4.6	7.2	18.4	40.2
100					8×8	8×8
180					8×8	
220					8×8	
270					8×8	
330					8×8	
470				8×8		
560	8×8	8×8	8×8			
680			8×8			
820	8×8	8×8	8×8			
1000	8×8		8×8			
1200	8×8					
1500	8×8					



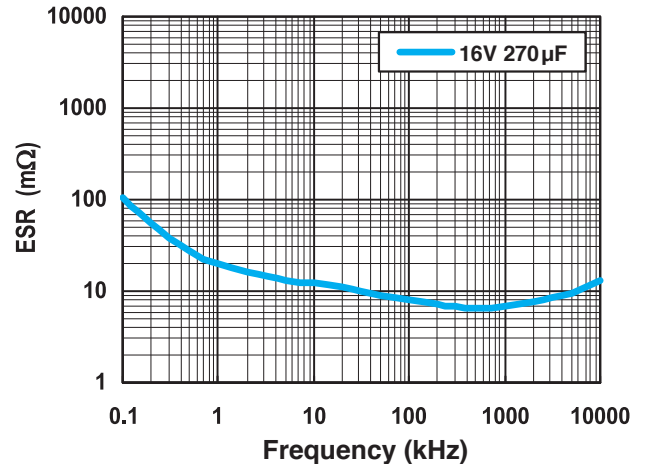
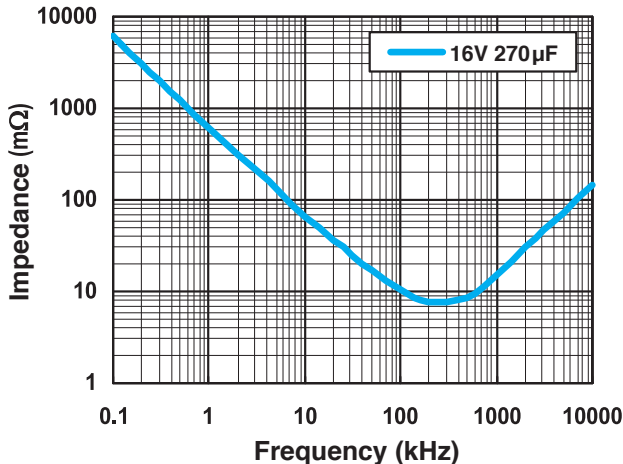
# RL8

## Standard Ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA rms)	NICHICON	FPCAP
2.5 (0E)	2.8	560	8×8	0.12	500	6	6100	RL80E561MDN1□□	FP-2R5RE561M-L8□□
		*560	8×8	0.12	500	6	6100	RL80E561MDNASQ□□	FP-2R5RE561M-L8□□-5K
		820	8×8	0.12	513	6	6100	RL80E821MDN1□□	FP-2R5RE821M-L8□□
		*820	8×8	0.12	513	6	6100	RL80E821MDNASQ□□	FP-2R5RE821M-L8□□-5K
		1000	8×8	0.12	625	6	6100	RL80E102MDN1□□	FP-2R5RE102M-L8□□
		1200	8×8	0.12	750	7	6100	RL80E122MDN1□□	FP-2R5RE122M-L8□□
		1500	8×8	0.12	938	7	6100	RL80E152MDN1□□	FP-2R5RE152M-L8□□
4.0 (0G)	4.6	560	8×8	0.12	560	6	6100	RL80G561MDN1□□	FP-4R0RE561M-L8□□
		*560	8×8	0.12	560	6	6100	RL80G561MDNASQ□□	FP-4R0RE561M-L8□□-5K
		820	8×8	0.12	820	6	6100	RL80G821MDN1□□	FP-4R0RE821M-L8□□
6.3 (0J)	7.2	470	8×8	0.12	592	8	5700	RL80J471MDN1□□	FP-6R3RE471M-L8□□
		*470	8×8	0.12	592	8	5700	RL80J471MDNASQ□□	FP-6R3RE471M-L8□□-5K
		560	8×8	0.12	706	8	5700	RL80J561MDN1□□	FP-6R3RE561M-L8□□
		*560	8×8	0.12	706	8	5700	RL80J561MDNASQ□□	FP-6R3RE561M-L8□□-5K
		680	8×8	0.12	857	8	5700	RL80J681MDN1□□	FP-6R3RE681M-L8□□
		820	8×8	0.12	1033	8	5700	RL80J821MDN1□□	FP-6R3RE821M-L8□□
		1000	8×8	0.12	1260	9	5700	RL80J102MDN1□□	FP-6R3RE102M-L8□□
16 (1C)	18.4	100	8×8	0.12	320	12	5000	RL81C101MDN1□□	FP-016RE101M-L8□□
		180	8×8	0.12	576	12	5000	RL81C181MDN1□□	FP-016RE181M-L8□□
		220	8×8	0.12	704	12	5000	RL81C221MDN1□□	FP-016RE221M-L8□□
		270	8×8	0.12	864	10	5000	RL81C271MDN1□□	FP-016RE271M-L8□□
		*270	8×8	0.12	864	10	5000	RL81C271MDNASQ□□	FP-016RE271M-L8□□-5K
		330	8×8	0.12	1056	12	5000	RL81C331MDN1□□	FP-016RE331M-L8□□
35 (1V)	40.2	100	8×8	0.12	700	25	3000	RL81V101MDN1□□	FP-035RE101M-L8□□

\* : 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.