

Surface Mount Type



Series : **FKS** Type : **V**

High temperature Lead-Free reflow



Features

- Endurance : 105 °C 2000 h
- 1 size smaller than series FK
- Vibration-proof product is available upon request. (φ8 mm and larger)
- RoHS compliant

Specifications

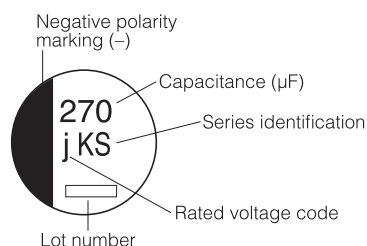
Category temperature range	-55 °C to +105 °C							
Rated voltage range	6.3 V.DC to 50 V.DC							
Rated capacitance range	39 μF to 1800 μF							
Capacitance tolerance	±20 % (120 Hz/+20 °C)							
Leakage current	I ≤ 0.01 CV or 3 (μA) After 2 minutes (Whichever is greater)							
Dissipation factor (tan δ)	Please see the attached characteristics list							
Characteristics at low temperature	V.DC	6.3	10	16	25	35	50	(Impedance ratio at 120 Hz)
	Z(-25 °C)/Z(+20 °C)	2	2	2	2	2	2	
	Z(-40 °C)/Z(+20 °C)	3	3	3	3	3	3	
	Z(-55 °C)/Z(+20 °C)	4	4	4	3	3	3	
Endurance	After applying rated working voltage for 2000 hours at +105 °C±2 °C and then being stabilized at +20 °C, capacitors shall meet the following limits.							
	Capacitance change	Within ±30 % of the initial value						
	tan δ	≤200 % of the initial limit						
	DC leakage current	Within the initial limit						
Shelf life	After storage for 1000 hours at +105 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)							
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits.							
	Capacitance change	Within ±10 % of the initial value						
	tan δ	Within the initial limit						
	DC leakage current	Within the initial limit						
AEC-Q200	AEC-Q200 compliant							

Frequency correction factor for ripple current

Frequency (Hz)	120	1 k	10 k	100 k to
Correction factor	0.65	0.85	0.95	1.00

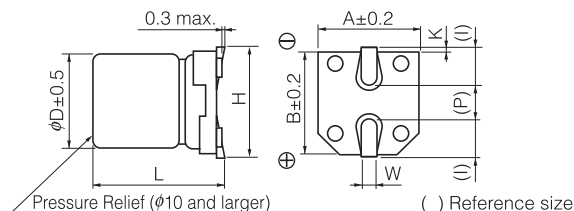
Marking

Example : 6.3 V.DC 270 μF
Marking color : BLACK



R. Voltage (V.DC)	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

Dimensions



(Unit : mm)

Size code	φD	L	A, B	H.	I	W	P	K
D	6.3	5.8±0.3	6.6	7.8 max	2.6	0.65±0.1	1.8	0.35 ^{+0.15} _{-0.20}
D8	6.3	7.7±0.3	6.6	7.8 max	2.6	0.65±0.1	1.8	0.35 ^{+0.15} _{-0.20}
F	8.0	10.2±0.3	8.3	10.0 max	3.4	0.90±0.2	3.1	0.70±0.20
G	10.0	10.2±0.3	10.3	12.0 max	3.5	0.90±0.2	4.6	0.70±0.20

Characteristics list

Endurance : 105 °C 2000 h

Rated voltage (V.DC)	Cap. (±20 %) (μF)	Case size (mm)		Size Code	Specification			Part No.	Reflow	Min. Packaging Q'ty
		φD	L		Ripple current (100 kHz) (+105 °C) (mA r.m.s.)	ESR (100 kHz) (+20 °C) (Ω)	tan δ (120 Hz) (+20 °C)			Taping (pcs)
6.3	270	6.3	5.8	D	240	0.36	0.26	EEEFK0J271SP	(5)	1000
	470	6.3	7.7	D8	280	0.34	0.26	EEEFKJ471XSP	(5)	900
	1800	10	10.2	G	850	0.08	0.26	EEEFK0J182SP	(6)	500
10	220	6.3	5.8	D	240	0.36	0.19	EEEFK1A221SP	(5)	1000
	330	6.3	7.7	D8	280	0.34	0.19	EEEFKA331XSP	(5)	900
	820	8	10.2	F	600	0.16	0.19	EEEFK1A821SP	(6)	500
	1200	10	10.2	G	850	0.08	0.19	EEEFK1A122SP	(6)	500
16	150	6.3	5.8	D	240	0.36	0.16	EEEFK1C151SP	(5)	1000
	270	6.3	7.7	D8	280	0.34	0.16	EEEFKC271XSP	(5)	900
	560	8	10.2	F	600	0.16	0.16	EEEFK1C561SP	(6)	500
	1000	10	10.2	G	850	0.08	0.16	EEEFK1C102SP	(6)	500
25	100	6.3	5.8	D	240	0.36	0.14	EEEFK1E101SP	(5)	1000
	150	6.3	7.7	D8	280	0.34	0.14	EEEFKE151XSP	(5)	900
	180	6.3	7.7	D8	280	0.34	0.14	EEEFKE181XSP	(5)	900
	390	8	10.2	F	600	0.16	0.14	EEEFK1E391SP	(6)	500
	680	10	10.2	G	850	0.08	0.14	EEEFK1E681SP	(6)	500
35	68	6.3	5.8	D	240	0.36	0.12	EEEFK1V680SP	(5)	1000
	82	6.3	5.8	D	240	0.36	0.12	EEEFK1V820SP	(5)	1000
	120	6.3	7.7	D8	280	0.34	0.12	EEEFKV121XSP	(5)	900
	270	8	10.2	F	600	0.16	0.12	EEEFK1V271SP	(6)	500
	470	10	10.2	G	850	0.08	0.12	EEEFK1V471SP	(6)	500
50	39	6.3	5.8	D	165	0.88	0.10	EEEFK1H390SP	(5)	1000
	82	6.3	7.7	D8	195	0.68	0.10	EEEFKH820XSP	(5)	900
	180	8	10.2	F	350	0.34	0.10	EEEFK1H181SP	(6)	500
	270	10	10.2	G	670	0.18	0.10	EEEFK1H271SP	(6)	500

If Part number exceeds 12 digits, voltage code is abbreviated as follows; 0J → J, 1A → A, 1C → C, 1E → E, 1V → V, 1H → H

· Please refer to the page of "Reflow Profile" and "The Taping Dimensions".

· When requesting vibration-proof product, please put the last "V" instead to "P"