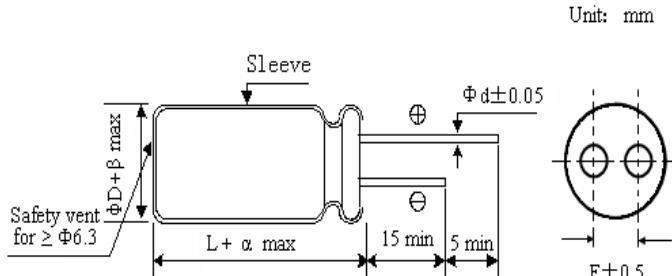


KF series**Features**

- ◆ 5mm Height , 1000 hours at 105°C.
- ◆ RoHS Compliant .

**Specifications**

Item	Performance Characteristics												
Temperature Range	-40~+105°C												
Rated Voltage Range	4~50Vdc												
Capacitance Range	0.1~470μF												
Capacitance Tolerance	±20% (120Hz, +20°C)												
Leakage Current (+20°C,max.)	I≤0.01CV or 3 (μA) After 2 minutes, whichever is greater measured with rated working voltage applied												
Dissipation Factor (tgδ) 120Hz, +20°C	Working Voltage(Vdc)	4	6.3	10	16	25	35	50					
	D.F (%) max.	37	28	24	20	16	13	12					
Low Temperature Characteristics (120Hz)	Working Voltage(Vdc)	4	6.3	10	16	25	35	50					
Impedance ratio max.	Z - 25°C / Z+20 °C	6	3	3	2	2	2	2					
Z - 40°C / Z+20 °C	12	8	5	4	3	3	3	3					
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C												
	Capacitance Change	≤±20% of the initial value. (4V: within ±30%)											
	D.F. (tgδ)	≤200% of the initial specified value											
	Leakage Current	≤The initial specified value											
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the load life characteristics listed above.												
Others	JISC-5101(IEC 60384)												

Diagram of Dimensions**Frequency Multipliers**

Hz μF	50	120	300	1K	10K~
<68	0.75	1.00	1.35	1.57	2.00
68~330	0.80	1.00	1.23	1.34	1.50
ΦD	4	5	6.3	8	
L	5	5	5	5	
F	1.5	2.0	2.5	3.5	
Φd	0.45	0.45	0.45	0.45	
α	+1.0				
β	+0.5				

Standard Ratings

wv (V)	Cap (μF)	Case Size	Ripple Current	wv (V)	Cap (μF)	Case Size	Ripple Current	wv (V)	Cap (μF)	Case Size	Ripple Current	wv (V)	Cap (μF)	Case Size	Ripple Current
4	33	5×5	30	10	22	4×5	24	25	10	4×5	20	50	0.1	4×5	1.0
	47	5×5	36		33	5×5	35		22	6.3×5	38		0.22	4×5	2.6
	100	6.3×5	60		47	6.3×5	46		33	6.3×5	48		0.47	4×5	3.8
	220	6.3×5	82		100	6.3×5	67		47	6.3×5	58		1	4×5	6.2
	470	8×5	90		220	8×5	116		100	8×5	97		2.2	4×5	11
6.3	22	4×5	22	16	10	4×5	18	35	2.2	4×5	7	50	3.3	4×5	14
	33	5×5	30		22	5×5	30		4.7	4×5	15		4.7	5×5	19
	47	5×5	36		33	6.3×5	40		10	5×5	25		10	6.3×5	30
	100	6.3×5	60		47	6.3×5	50		22	6.3×5	48		22	8×5	52
	220	8×5	103		100	6.3×5	73		33	6.3×5	59		33	8×5	63
	330	8×5	127		220	8×5	126		47	8×5	82		47	8×5	75

Max Allowable Ripple Current (mA,rms) at 105°C 120Hz, Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.