

# ZF series

## Features

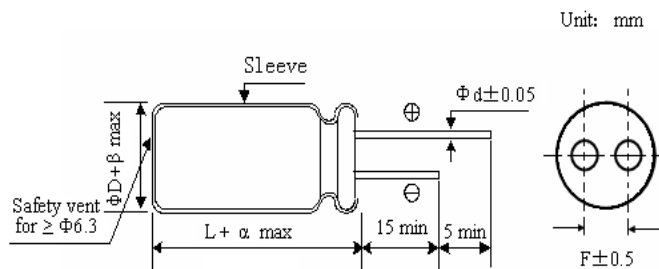
- ◆ 5mm Height , Low impedance , 1000 hours at 105°C.
- ◆ RoHS Compliant .



## Specifications

Item	Performance Characteristics							
Temperature Range	-40~+105°C							
Rated Voltage Range	6.3~50Vdc							
Capacitance Range	1~330μF							
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)	6.3	10	16	25	35	50	
	D.F (%) max.	22	20	18	14	12	10	
Low Temperature Characteristics (120Hz) Impedance ratio max.	Working Voltage(Vdc)	6.3	10	16	25	35	50	
	Z - 25°C / Z+20 °C	2	2	2	2	2	2	
	Z - 40°C / Z+20 °C	4	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							
	Rated Voltage	6.3 to 10Vdc			16 to 50Vdc			
	Capacitance Change	≤±30% of the initial value			≤±25% of the initial value			
	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)							

## Frequency Multipliers



## Diagram of Dimensions

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	Impedance	Ripple Current	wv (V)	Cap(μF)	Case Size	Impedance	Ripple Current	wv (V)	Cap(μF)	Case Size	Impedance	Ripple Current
6.3	22	4×5	5.0	50	16	10	4×5	5.0	50	35	2.2	4×5	5.0	50
	47	5×5	2.6	80		22	5×5	2.6	80		4.7	4×5	5.0	50
	100	6.3×5	1.3	115		33	6.3×5	1.3	115		6.8	5×5	2.6	80
	220	6.3×5	0.6	180		47	6.3×5	1.3	115		10	5×5	2.6	80
	330	8×5	0.3	265		100	6.3×5	0.6	180		22	6.3×5	1.3	115
10	22	5×5	2.6	80	25	4.7	4×5	5.0	50	50	1	4×5	5.0	50
	47	6.3×5	1.3	115		10	5×5	2.6	80		2.2	4×5	5.0	50
	100	6.3×5	0.6	180		22	6.3×5	1.3	115		3.3	4×5	5.0	50
	220	6.3×5	0.27	248		33	6.3×5	1.3	115		10	5×5	2.6	80

Max Allowable Ripple Current (mA, rms) at 105°C 100KHz, Impedance(Ω) at 20°C 100KHz, Case Size ΦD×L(mm). Above size is the standard size for our product. If you need special size please contact our sales offices.