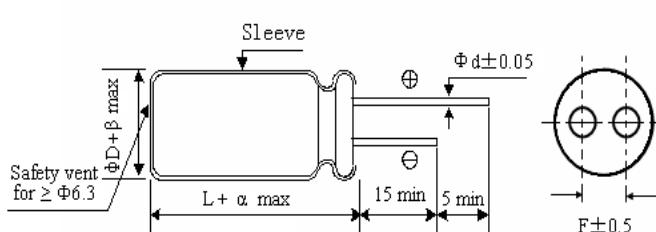


ZS series**Features**

- ◆ 7(9)mm 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	1~470μF										
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)	6.3	10	16	25						
	D.F (%) max.	18	16	14	12						
Low Temperature Characteristics (120Hz) Impedance ratio max.	Working Voltage(Vdc)	6.3	10	16	25						
	Z - 25°C / Z+20 °C	2	2	2	2						
	Z - 4 0°C / Z+20 °C	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 35Vdc							
	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**

Hz μF	120	1K	10K	100K
<220	0.40	0.75	0.90	1.00
220	0.50	0.85	0.94	1.00
ΦD	4	5	6.3	8
L	7	7	7	7
F	1.5	2.0	2.5	3.5
Φd	0.45	0.45	0.45	0.45
α	(L≤7)+ 1.0		(L≥9) +1.5	
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	33	5×7	1.7	110	16	22	5×7	1.7	110	35	10	5×7	1.7	110
	47	5×7	1.7	110		33	6.3×7	0.8	160		22	6.3×7	0.8	160
	100	6.3×7	0.8	160		47	6.3×7	0.8	160		33	8×7	0.5	200
	220	8×7	0.5	200		68	8×7	0.5	200		47	8×7	0.5	210
	470	8×9	0.23	294		100	8×7	0.5	200		68	8×7	0.3	254
10	22	4×7	3.3	70	25	10	4×7	3.3	70	50	1	4×7	6.0	33
	33	5×7	1.7	110		22	5×7	1.7	110		2.2	4×7	4.5	52
	47	6.3×7	0.8	160		33	6.3×7	0.8	160		4.7	5×9	3.1	80
	100	8×7	0.5	200		47	8×7	0.5	200		10	6.3×9	0.8	100
	220	8×7	0.5	200		68	8×7	0.5	200		22	6.3×9	0.6	160

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.