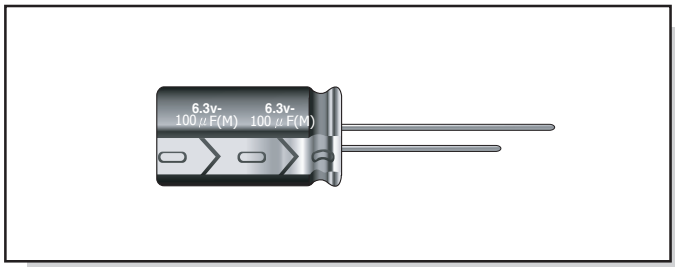
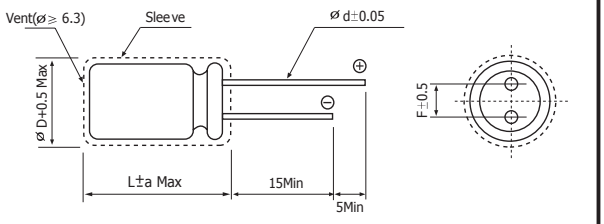


- **Load Life of 3,000 Hours at 105°C**
- **For power supply**

■ SPECIFICATIONS

Operating Temperature Range	-25~+105°C
Capacitance Tolerance	±20% (at 20°C, 120Hz)
Leakage Current	I≤0.03 CV or 3 uA whichever is greater (at 20°C, after 5 minutes) I:Leakage Current (uA) C: Nominal Capacitance (uF) V: Rated Voltage (V)
Dissipation Factor (at 20°C, 120Hz)	Rated Voltage(V): 160 / 200 / 250 / 400 / 450 tan δ: 0.18 / 0.18 / 0.18 / 0.24 / 0.24
Temperature Characteristics (Impedance Ratio at 120Hz)	W.V: 160 / 200 / 250 / 400 / 450 Z(-40°C)/Z(+20°C): 6 / 8
Load Life (+105°C)	Time: 3,000 hours after an application of DC bias voltage plus the rated ripple current. The peak voltage shall not exceed rated DC voltage Capacitance Change: Within ±20% of the initial value Dissipation Factor: 200% of the initial specified value or less Leakage Current: Initial specified value or less
Shelf Life (+105°C)	1000 hours. No voltage applied. After Test: U_R to be applied for 30 minutes, 24 to 48 hours before measurement.

■ DIMENSION



ØD	8	10	12.5	16	18
F	3.5	5.0		7.5	
Ød	0.5,L=20:0.6	0.6		0.8	
a	1.5			2	

■ MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

Cap (UF) \ Freq(Hz)	120	1K	10K	100K
~180	0.40	0.75	0.90	1.00
220~	0.50	0.85	0.94	1.00

■ STANDARD RATINGS

V	160		200		250		400		450	
	Size(mm)	Ripple	Size(mm)	Ripple	Size(mm)	Ripple	Size(mm)	Ripple	Size(mm)	Ripple
uF	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms
3.3							10x13	150		
4.7					8x12	160	10x16	220	10x20	220
10	10x16	320	10x16	320	10x16	320	10x20	350	12.5x20	450
22	10x20	500	10x20	500	10x20	500	12.5x20	760	16x20	730
33	10x20	650	10x20	650	12.5x20	800	16x20	900	16x25	980
47	10x20	750	12.5x20	980	12.5x20	980	18x20	1180	18x25	1200
68	12.5x20	1180	12.5x25	1300	16x20	1300	18x25	1470		
			16x20	1300						
100	12.5x25	1420	16x20	1420	16x25	1530				
	16x20	1420								
220	18x25	2370	18x30	2640						

Ripple Current: mA(rms) at 100KHz, 105°C