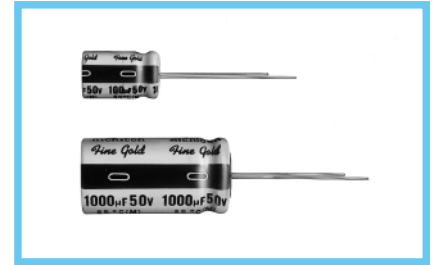


**FG** series High Grade Standard Type, For Audio Equipment



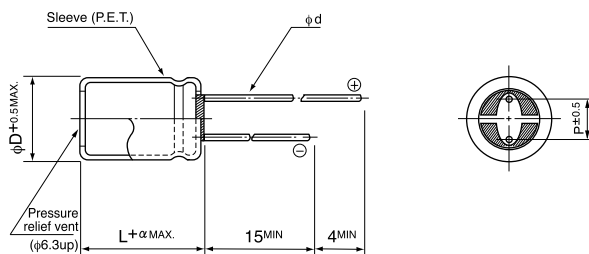
- "Fine Gold" MUSE acoustic series suited for high grade audio equipment, using state of the art etching techniques.
- Rich sound in the bass register and clearer high end, most suited for AV equipment like DVD, MD.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

Item	Performance Characteristics												
Category Temperature Range	-40 ~ +85°C												
Rated Voltage Range	6.3 ~ 100V												
Rated Capacitance Range	0.1 ~ 10000µF												
Capacitance Tolerance	± 20% at 120Hz, 20°C												
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.01CV or 3 (µA) , whichever is greater.												
tan δ	Measurement frequency : 120Hz, Temperature : 20°C												
	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100			
	tan δ (MAX.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08			
For capacitance of more than 1000µF add 0.02 for every increase of 1000µF.													
Stability at Low Temperature	Measurement frequency : 120Hz												
	Rated voltage (V)		6.3	10	16	25	35	50	63	80	100		
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2	2	2	2	2		
Z-40°C / Z+20°C		8	6	4	4	3	3	3	3	3			
Endurance	After 1000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.		Capacitance change	Within ±20% of the initial measurement for units of not more than 16V or φ6.3							Within ±15% of the initial measurement for units of not less than 25V or above φ6.3		
			tan δ	150% or less of initial specified value									
			Leakage current	Initial specified value or less									
			Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.									
Marking	Printed with black color letter on gold sleeve.												

## Radial Lead Type

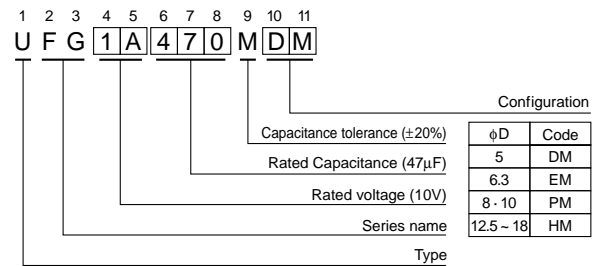


	(mm)						
φD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.6	0.6	0.8	0.8	0.8

α	(L < 20)	1.5
	(L ≥ 20)	2.0

- Please refer to page 21 about the end seal configuration.

## Type numbering system (Example : 10V 47µF)



Please refer to page 21, 22, 23 about the formed or taped product spec.  
Please refer to page 3 for the minimum order quantity.

- Dimension table in next page.

## ■Dimensions

Cap.( $\mu$ F)	Code	V		6.3		10		16		25		35		50	
		0J	1A	1C	1E	1V	1H								
0.1	0R1													5×11	1.1
0.22	R22													5×11	2.4
0.33	R33													5×11	3.6
0.47	R47													5×11	5.0
1	010													5×11	9.0
2.2	2R2													5×11	18
3.3	3R3													5×11	22
4.7	4R7													5×11	27
10	100													5×11	39
22	220								5×11	50	6.3×11	60	6.3×11	65	
33	330							5×11	57	6.3×11	70	6.3×11	75	8×11.5	93
47	470				5×11	60	6.3×11	74	6.3×11	85	8×11.5	101	8×11.5	111	
100	101				6.3×11	99	8×11.5	128	8×11.5	140	10×12.5	176	10×16	215	
220	221				8×11.5	170	10×12.5	226	10×16	260	10×20	320	12.5×20	390	
330	331				10×12.5	247	10×16	309	10×20	351	12.5×20	446	12.5×20	488	
470	471	10×12.5	270	10×16	330	10×20	406	12.5×20	476	12.5×25	590	16×25	650		
1000	102	10×20	485	12.5×20	601	12.5×25	723	16×25	854	16×25	1060	16×31.5	1143		
2200	222	12.5×25	867	16×25	1047	16×25	1290	16×35.5	1570	18×35.5	1840				
3300	332	16×25	1135	16×31.5	1520	16×35.5	1720	18×40	1794						
4700	472	16×31.5	1431	16×35.5	1840	18×35.5	2140								
6800	682	18×35.5	1810	18×40	2049										
10000	103	18×40	2100												

Cap.( $\mu$ F)	Code	V		63		80		100	
		1J	1K	2A					
0.1	0R1					5×11	2.3		
0.22	R22					5×11	5.5		
0.33	R33					5×11	8.0		
0.47	R47					5×11	10		
1	010					5×11	15		
2.2	2R2					5×11	22		
3.3	3R3					5×11	27		
4.7	4R7					5×11	36		
10	100	6.3×11	50	6.3×11	55	8×11.5	65		
22	220	8×11.5	85	8×11.5	100	10×12.5	110		
33	330	8×11.5	105	10×12.5	130	10×16	150		
47	470	10×12.5	140	10×16	170	10×20	190		
100	101	10×20	255	12.5×20	270	12.5×20	300		
220	221	12.5×20	420	12.5×25	490	16×25	549		
330	331	12.5×25	541	16×31.5	650	16×31.5	734		
470	471	16×25	840	16×35.5	920	18×35.5	980		
1000	102	18×35.5	1400					Case size $\phi$ D × L (mm)	Rated ripple

Rated Ripple (mA rms) at 85°C 120Hz

### ●Frequency coefficient of rated ripple current

Cap.( $\mu$ F)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ~
~ 47		0.75	1.00	1.35	1.57	2.00
100 ~ 470		0.80	1.00	1.23	1.34	1.50
1000 ~ 10000		0.85	1.00	1.10	1.13	1.15