

Miniature Standard Capacitors for Audio

GREEN
CAPFor
Audio

TONEREX

- Adopting the newly developed formation method and composite electrolytic paper for audio application has reduced distortion, achieving high-quality sound.
- All lead wires are oxygen-free copper wires to reduce distortion.



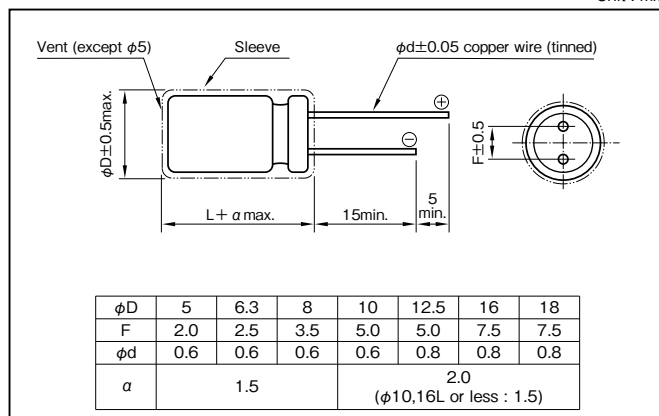
Marking color : Gold print on a black sleeve

Specifications

Item	Performance									
Category temperature range (°C)	-40 to +85									
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)									
Leakage current (μA)	Less than 0.01CV or 4 whichever is larger (after 5 minutes) C : Rated capacitance (μF) ; V: Rated voltage (V) (20°C)									
Tangent of loss angle (tanδ)	Rated voltage (V)		6.3	10	16	25	35	50	63	100
	tanδ (max.)		0.24	0.20	0.16	0.14	0.12	0.10	0.09	0.08
	0.02 is added to every 1000μF increase over 1000μF (20°C,120Hz)									
Endurance (85°C) (Applied ripple current)	Test time		1000 hours							
	Leakage current		The initial specified value or less							
	Percentage of capacitance change		Within ±20% of initial value							
	Tangent of the loss angle		150% or less of the initial specified value							
Shelf life (85°C)	Test time : 1000 hours. Other have same as endurance. Voltage application treatment : According to JIS C5101 -1									
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)									

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

Rated voltage (V)	Frequency (Hz)	50 · 60	120	1k	10k	100k
	CV (μF × WV)					
6.3 to 16	All CV value	0.8	1	1.1	1.2	1.2
	≤1000	0.8	1	1.5	1.7	1.7
25 to 35	1000<	0.8	1	1.2	1.3	1.3
	≤1000	0.8	1	1.6	1.9	1.9
50 to 100	1000<	0.8	1	1.2	1.3	1.3
	≤1000	0.8	1	1.2	1.3	1.3

Part numbering system (example : 25V100μF)

ROB	—	25	V	101	M	G3	#	—	
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping (Forming) symbol

Case symbol

Case φD×L (mm)	Casing Symbol	Case φD×L (mm)	Casing Symbol	Case φD×L (mm)	Casing Symbol	Case φD×L (mm)	Casing Symbol
5×11	E3	10×12.5	H3	12.5×20	I5	16×31.5	J7
6.3×11	F3	10×16	H4	12.5×25	I6	16×35.5	J8
8×11.5	G3	10×20	H5	16×25	J6	18×35.5	K8
						18×40	K9

Standard Ratings

Rated voltage (V)	6.3		10		16		25		35		50		63		100	
	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)	Case	Rated ripple current (mA)
1	—	—	—	—	—	—	—	—	—	—	5×11	10	—	—	5×11	15
2.2	—	—	—	—	—	—	—	—	—	—	5×11	20	—	—	5×11	25
3.3	—	—	—	—	—	—	—	—	—	—	5×11	25	—	—	5×11	30
4.7	—	—	—	—	—	—	5×11	25	—	—	5×11	35	5×11	35	6.3×11	40
10	—	—	—	—	5×11	35	5×11	40	5×11	45	5×11	50	6.3×11	60	8×11.5	70
22	—	—	5×11	50	5×11	60	5×11	60	6.3×11	75	6.3×11	80	8×11.5	100	10×12.5	120
33	5×11	55	5×11	65	5×11	70	6.3×11	80	6.3×11	90	8×11.5	110	8×11.5	115	10×16	160
47	5×11	65	5×11	75	6.3×11	95	6.3×11	100	8×11.5	120	8×11.5	130	10×12.5	165	10×20	210
100	6.3×11	110	6.3×11	120	8×11.5	150	8×11.5	165	10×12.5	210	10×16	250	10×20	285	12.5×20	340
220	8×11.5	185	8×11.5	200	10×12.5	265	10×16	310	10×20	365	12.5×20	440	12.5×20	470	16×25	620
330	10×12.5	265	10×12.5	290	10×16	350	10×20	410	12.5×20	500	12.5×20	540	12.5×25	620	16×31.5	820
470	10×12.5	315	10×16	380	10×20	460	12.5×20	550	12.5×25	640	16×25	800	16×25	840	18×35.5	1000
1000	10×20	550	12.5×20	670	12.5×25	810	16×25	1000	16×25	1050	16×31.5	1200	18×35.5	1500	—	—
2200	12.5×25	980	16×25	1200	16×25	1350	16×35.5	1650	18×35.5	1900	—	—	—	—	—	—
3300	16×25	1300	16×31.5	1600	16×35.5	1800	18×40	2100	—	—	—	—	—	—	—	—
4700	16×31.5	1700	16×35.5	1900	18×35.5	2400	—	—	—	—	—	—	—	—	—	—
6800	16×35.5	2100	18×40	2600	—	—	—	—	—	—	—	—	—	—	—	—
10000	18×40	2800	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 85°C, 120Hz