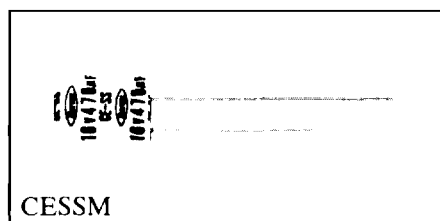


CESSM SERIES

LOW PROFILE RADIAL TYPE

• FEATURES

1. 7mm height, 4, 5, and 6.3mm dia.
2. Suitable for compact mount.
3. 85°C, 1000 hours guaranteed.
4. Washable with Freon TE, TES, TMS for 5 minutes.



• GENERAL SPECIFICATIONS

Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Rated voltage range $4\text{WV} \sim 50\text{WV}$

Nominal capacitance range $0.1 \mu\text{F} \sim 220 \mu\text{F}$

Capacitance tolerance $\pm 20\%$
(At 20°C , 120 Hz)

Max. ripple current See standard rating table
(At 85°C , 120 Hz)

Leakage current $I \leq 0.01\text{CV}$ or $3 \mu\text{A}$ (whichever is greater)
(At 20°C , after 2 minutes) I : Leakage current (μA), C: Nominal capacitance (μF),
V : Rated voltage (VDC)

Tangent of loss angle
 $\tan \delta$ (At 20°C , 120 Hz)

Shall not exceed the following value.

Cap. \ RV (VDC)	4	6.3	10	16	25	35	50
1000 μF or less	0.35	0.25	0.20	0.17	0.15	0.12	0.10
More than 1000 μF	Add .02 to above value for every 1000 μF or less.						

Impedance ratio at low
temperature
(At 120 Hz)

Shall not exceed the following value.

RV (VDC)	4	6.3	10	16	25	35	50
$-25^{\circ}\text{C}/20^{\circ}\text{C}$	7	5	4	3	2	2	2
$-40^{\circ}\text{C}/20^{\circ}\text{C}$	15	10	8	6	4	4	4

Life test

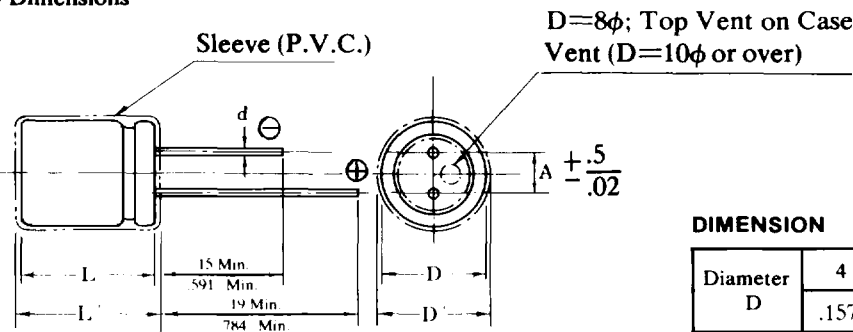
At $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for a period of 1,000 hours with rated voltage.

Capacitance change	$\leq \pm 25\%$ of initial value
Leakage current	Same as specified value in this table or less
Tan δ	200% or less of the value in this table

Standard

JIS C 5141(1982) characteristic W

• **Dimensions**



- **mm**
 $D' = (D + 0.5) \text{ Max}$
 $L' = (L + 1.0) \text{ Max}$
- **Inches**
 $D' = (D + .020) \text{ Max}$
 $L' = (L + .039) \text{ Max}$

DIMENSION Unit = $\frac{\text{mm}}{\text{inch}}$

Diameter D	4	5	6.3	8	10	13	16
Lead Space A	1.5	2	2.5	3.5	5	5	7.5
Lead diameter d	.45	.45	.45	.6	.6	.6	.8
	.018	.018	.018	.024	.024	.024	.031

Type No	WV (VDC)	Cap. (μF) @ 120Hz, 20°C	Max. Leakage (μA) @ 20°C	Max E S R (Ω) @ 120Hz, 20°C	Max Ripple (μA) @ 120Hz, 85°C	Nominal Case Size	
						DxL (mm)	DxL (inches)
CESSM0G330	4	33	3	17.6	33	4 x 7	.157 x .276
CESSM0G470	4	47	3	12.3	43	4 x 7	.157 x .276
CESSM0G101	4	100	4	5.80	72	5 x 7	.197 x .276
CESSM0G221	4	220	9	2.64	120	6.3 x 7	.248 x .276
CESSM0J220	6.3	22	3	18.8	35	4 x 7	.157 x .276
CESSM0J330	6.3	33	3	12.5	50	5 x 7	.197 x .276
CESSM0J470	6.3	47	3	8.82	60	5 x 7	.197 x .276
CESSM0J101	6.3	100	6.3	4.14	90	6.3 x 7	.248 x .276
CESSM1A220	10	22	3	15.1	45	5 x 7	.197 x .276
CESSM1A330A	10	33	4	10.0	50	5 x 7	.197 x .276
CESSM1A470	10	47	5	7.05	80	6.3 x 7	.248 x .276
CESSM1A101	10	100	10	3.32	110	6.3 x 7	.248 x .276
CESSM1C6R8	16	6.8	3	41.4	24	4 x 7	.157 x .276
CESSM1C100	16	10	3	28.2	40	4 x 7	.157 x .276
CESSM1C220A	16	22	4	12.8	45	5 x 7	.197 x .276
CESSM1C330	16	33	6	8.54	70	6.3 x 7	.248 x .276
CESSM1C470	16	47	7.5	6.00	80	6.3 x 7	.248 x .276

Type No.	VV (VDC)	Cap. (μ F) @ 120Hz, 20°C	Max. Leakage (μ A) @ 20°C	Max. ESR (Ω) @ 120Hz, 20°C	Max. Ripple (mA) @ 120Hz, 85°C	Nominal Case Size	
						DxL (mm)	DxL (inches)
CESSM1E4R7	25	4.7	3	52.9	25	4 x 7	.157 x .276
CESSM1E6R8	25	6.8	3	36.6	30	4 x 7	.157 x .276
CESSM1E100	25	10	3	24.9	45	5 x 7	.197 x .276
CESSM1E220	25	22	5.5	11.3	60	6.3 x 7	.248 x .276
CESSM1E330	25	33	8.3	7.53	70	6.3 x 7	.248 x .276
CESSM1E470	25	47	11.8	5.29	95	6.3 x 7	.248 x .276
CESSM1V4R7	35	4.7	3	42.3	25	4 x 7	.157 x .276
CESSM1V6R8	35	6.8	3	29.2	30	5 x 7	.197 x .276
CESSM1V100A	35	10	3.5	19.9	45	5 x 7	.197 x .276
CESSM1V220	35	22	7.7	9.04	60	6.3 x 7	.248 x .276
CESSM1HR10	50	0.1	3	1,658	2.0	4 x 7	.157 x .276
CESSM1HR22	50	0.22	3	754	3.0	4 x 7	.157 x .276
CESSM1HR33	50	0.33	3	502	5.0	4 x 7	.157 x .276
CESSM1HR47	50	0.47	3	353	6.5	4 x 7	.157 x .276
CESSM1H010	50	1	3	166	10	4 x 7	.157 x .276
CESSM1H2R2	50	2.2	3	75.4	20	4 x 7	.157 x .276
CESSM1H3R3	50	3.3	3	50.2	25	4 x 7	.157 x .276
CESSM1H4R7	50	4.7	3	35.3	30	5 x 7	.197 x .276
CESSM1H6R8	50	6.8	3.4	24.4	40	6.3 x 7	.248 x .276
CESSM1H100	50	10	5	16.6	50	6.3 x 7	.248 x .276

• **Typical Characteristics**

