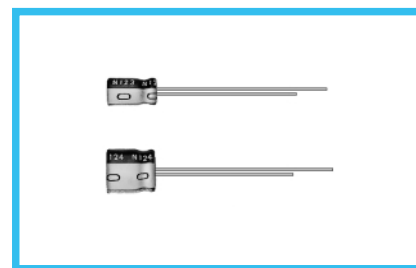


**SF** 7mmL, Low Impedance  
series



- Low impedance over wide temperature range of  $-55$  to  $+105^{\circ}\text{C}$ , with 7mm height.
- Compliant to the RoHS directive (2011/65/EU).

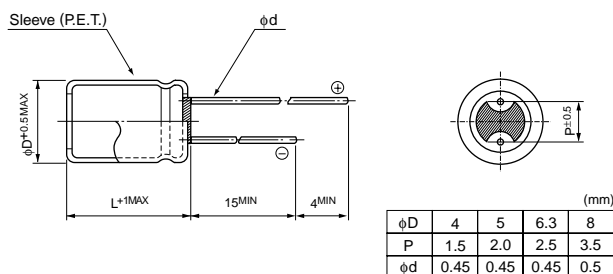
SF Low Impedance ST



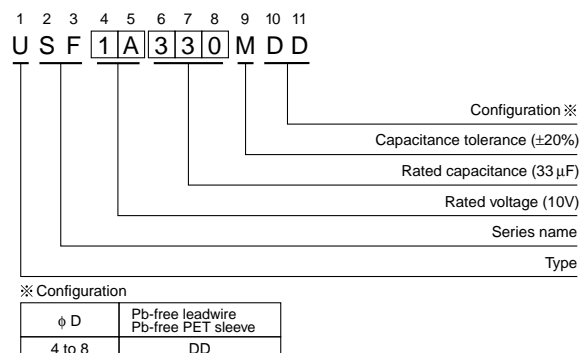
## Specifications

Item	Performance Characteristics					
Category Temperature Range	$-55$ to $+105^{\circ}\text{C}$					
Rated Voltage Range	6.3 to 35V					
Rated Capacitance Range	6.8 to 220 $\mu\text{F}$					
Capacitance Tolerance	$\pm 20\%$ at 120Hz, $20^{\circ}\text{C}$					
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than $0.01\text{CV}$ or $3(\mu\text{A})$ , whichever is greater.					
Tangent of loss angle ( $\tan \delta$ )	Measurement frequency : 120Hz, Temperature : $20^{\circ}\text{C}$					
	Rated voltage (V)	6.3	10	16	25	35
	$\tan \delta$ (MAX.)	0.18	0.16	0.14	0.12	0.12
Stability at Low Temperature	Measurement frequency : 120Hz					
	Rated voltage (V)	6.3	10	16	25	35
	Impedance ratio $Z_{-25^{\circ}\text{C}} / Z_{+20^{\circ}\text{C}}$	2	2	2	2	2
	$Z_T / Z_{20}$ (MAX.)	$Z_{-55^{\circ}\text{C}} / Z_{+20^{\circ}\text{C}}$	3	3	3	3
Endurance	The specifications listed at right shall be met when the capacitors are restored to $20^{\circ}\text{C}$ after the rated voltage is applied for 1000 hours at $105^{\circ}\text{C}$ .					
Shelf Life	After storing the capacitors under no load at $105^{\circ}\text{C}$ for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at $20^{\circ}\text{C}$ , they shall meet the specified values for the endurance characteristics listed above.					
Marking	Printed with white color letter on dark brown sleeve.					

## Radial Lead Type



## Type numbering system (Example : 10V 33 $\mu\text{F}$ )



## Dimensions

V		6.3			10			16			25			35			
Cap.(μF)	Code	0J			1A			1C			1E			1V			
6.8	6R8													4 × 7	3.3	70	
10	100											4 × 7	3.3	70	5 × 7	1.7	110
15	150							4 × 7	3.3	70		5 × 7	1.7	110	6.3 × 7	0.8	160
22	220				4 × 7	3.3	70	5 × 7	1.7	110		5 × 7	1.7	110	6.3 × 7	0.8	160
33	330	5 × 7	1.7	110	5 × 7	1.7	110	6.3 × 7	0.8	160		6.3 × 7	0.8	160	8 × 7	0.5	200
47	470	5 × 7	1.7	110	6.3 × 7	0.8	160	6.3 × 7	0.8	160		8 × 7	0.5	200			
68	680	6.3 × 7	0.8	160	6.3 × 7	0.8	160	8 × 7	0.5	200		8 × 7	0.5	200			
100	101	6.3 × 7	0.8	160	8 × 7	0.5	200	8 × 7	0.5	200							
150	151	8 × 7	0.5	200	8 × 7	0.5	200								Case size φD × L (mm)	Impe- dance	Rated ripple
220	221	8 × 7	0.5	200													

Max. Impedance ( $\Omega$ ) at  $20^{\circ}\text{C}$  100kHz  
Rated ripple current (mA rms) at  $105^{\circ}\text{C}$  100kHz

## Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.

CAT.8100C