



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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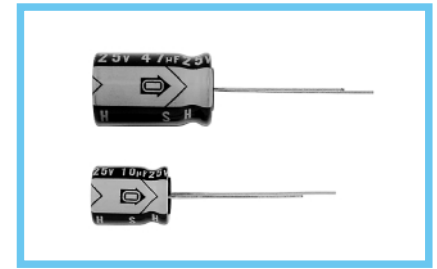
## SH series Vertical Time Constant Circuit Use



Anti-Solvent  
Feature

- Designed specifically for vertical time constant circuits of TV's.
- Adapted to the RoHS directive (2002/95/EC).

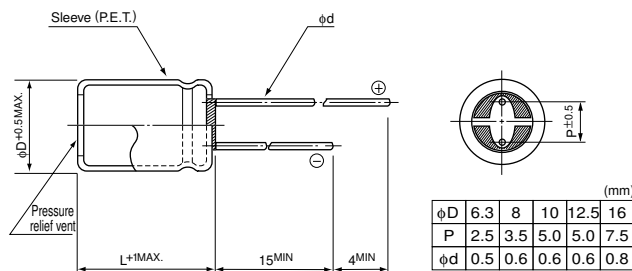
Products which are scheduled to discontinue.  
Not recommended for new designs



### Specifications

Item	Performance Characteristics			
Category Temperature Range	-40 to +85°C			
Rated Voltage Range	16 to 50V			
Rated Capacitance Range	0.47 to 470μF			
Capacitance Tolerance	±20% (M) (±10% (K) semi-standard) at 120Hz, 20°C			
Leakage Current	After 2 minutes' application of rated voltage, leakage current is 0.01CV + 3 (μA) or less.			
tan δ	0.07 or less at 120Hz, 20°C			
Stability at Low and High Temperature	Measurement frequency : 120Hz			
	Temperature	Capacitance change / 20°C	tan δ (MAX.)	Impedance ratio ZT / Z+20°C (MAX.)
	-40°C	within -20%	0.21	2
	+85°C	within +20%	0.07	—
Endurance	After 1000 hours' application of rated voltage at 85°C, capacitors meet the characteristics requirements listed at right.		Capacitance change	Within ±10% of initial value
			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 white color letter on black sleeve.			

### Radial Lead Type



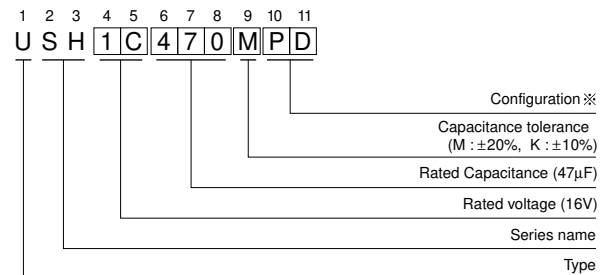
• Please refer to page 20 about the end seal configuration.

### Dimensions

φD × L (mm)

Cap. (μF)	V	Code		
		16	25	50
		1C	1E	1H
0.47	R47			6.3 × 11
1	010			6.3 × 11
2.2	2R2			6.3 × 11
3.3	3R3		6.3 × 11	6.3 × 11
4.7	4R7		6.3 × 11	8 × 11.5
10	100	8 × 11.5	10 × 12.5	10 × 16
22	220	10 × 16	10 × 16	10 × 20
33	330	10 × 16	10 × 20	12.5 × 20
47	470	10 × 20	12.5 × 20	12.5 × 25
100	101	12.5 × 20	12.5 × 25	16 × 25
220	221	12.5 × 25	16 × 25	16 × 35.5
330	331	16 × 25	16 × 31.5	
470	471	16 × 35.5		

### Type numbering system (Example : 16V 47μF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
6.3	ED
8 · 10	PD
12.5 · 16	HD

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