

SAMWHA Electric's new Snap-in series

In order to provide more options for customers, Samwha Electric has launched two new Snap-in type "JR" and "HH" series in 2021.

"JR" series, an upgrade series of HF series (5,000 hours), has temperature range of -25° C to 85° C with the longest lifetime up to 10,000 hours in the lineup. Provided in 400 and 450 volts with capacitance of 56 to 680μ F, it would be an ideal series for applications with requirement of long lifetime at 85° C.

Additionally, "HH" series is released to improve the ripple current and surge voltage. Mainly offered in 450V and capacitance range of 68 to $560\mu F$ at $-25^{\circ}C$ to $105^{\circ}C$, it's most important features are endurance of surge voltage, which makes it ideal for home appliance applications with its stability under the rise of voltage situation and high ripple current.

These two new series will offer wider spectrum of usage for many applications especially power electronics, inverters, and home appliance based on their characteristics such as longer lifetime and higher ripple current.

Key Features ("JR" Series)

Item	Characteristics		
Operating temperature range	-25 ~ +85°C		
Capacitance tolerance	±20% at 120Hz, 20°C		
Leakage current max.	$I=3\sqrt{CV}$ (µA) (after 5 minutes)		
Dissipation factor max. (120Hz, 20°C)	WV	400	450
	tan∂	0.15	0.20
Load life	Leakage current Less than specified value		
(after application of the rated	Capacitance change	Within ±20% of initial value	
voltage for 10000 hours at 85°C)	tan∂	Less than 200% of specified va	alue
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and tanô are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4		

Key Features ("HH" Series)

Item	Characteristics		
Operating temperature range	-25 ~ +105°C		
Capacitance tolerance	±20% at 120Hz, 20°C		
Leakage current max.	$I=3\sqrt{CV} (\mu A)$ (after 5 minutes)		
Dissipation factor max. (at 120Hz, 20°C)	WV	450	
	tan∂	0.20	
Load life	Leakage current Less than specified value		
(after application of the rated	Capacitance change	Within ±20% of initial value	
voltage for 3000 hours at 105°C)	tan∂	Less than 200% of specified value	
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tan∂ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4		