

This product is completed the lead-free and RoHS.



# DATA SHEET

Date : 2011. 02. 08.

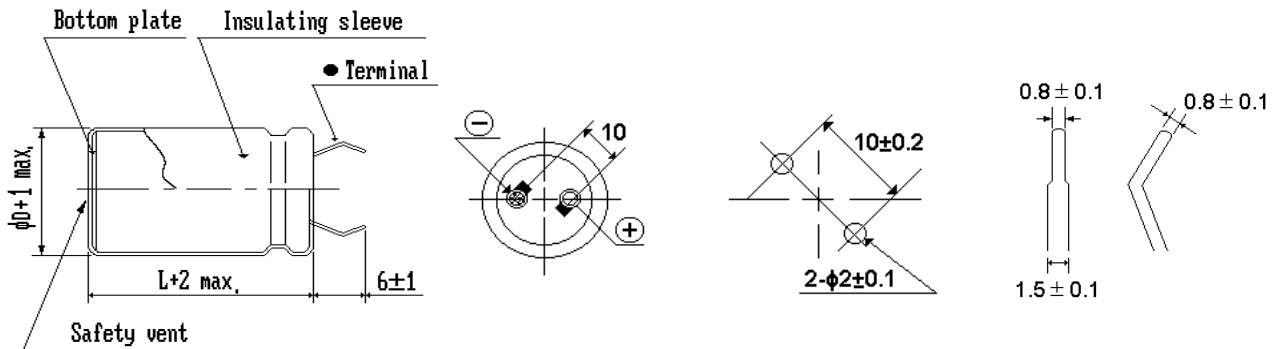
Drawing No. : SC-ARY233

## Aluminum Electrolytic Capacitors

Type-name : HE

Part No : HE 1H 109 M 30045 HA

Dimensions(mm)



$\phi D$	30
L	45

Dimensions of  $\phi D$  & L

Rated Voltage	50 V
Capacitance at 120Hz, 20 °C	10000 $\mu F$
Tolerance at 120Hz, 20 °C	$\pm 20 \%$
Surge Voltage	63 V
Ripple current at 120Hz, 105 °C	4.24 A rms
Leakage current after 5 minute	2121 $\mu A$
Dissipation factor ( $\tan \delta$ ) at 120Hz, 20 °C	0.34
Equivalent series resistance(E.S.R) at 120Hz, 20 °C	0.05 $\Omega$
Temperature range	-40 ~ +105 °C
Load life at 105 °C	2000 hours
Shelf life at 105 °C	1000 hours

Approved

G. H. Um

Technical team manager



**SAMWHA ELECTRIC CO., LTD.**