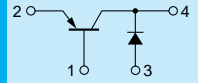


# SAH02

Equivalent circuit



Silicon PNP Epitaxial Planar Transistor with Shottky Barrier Diode

Application : Chopper Regulator

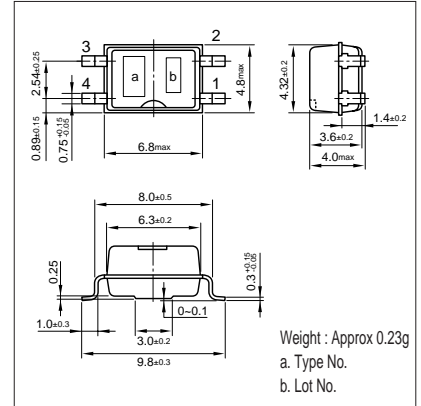
**Absolute maximum ratings** (Ta=25°C)

Symbol	SAH02	Unit
V <sub>CB0</sub>	-30	V
V <sub>CE0</sub>	-30	V
V <sub>EB0</sub>	-10	V
I <sub>c</sub>	-3	A
I <sub>B</sub>	-0.5	A
P <sub>c</sub>	800(Ta=25°C)	mW
T <sub>j</sub>	125	°C
T <sub>stg</sub>	-40 to +125	°C

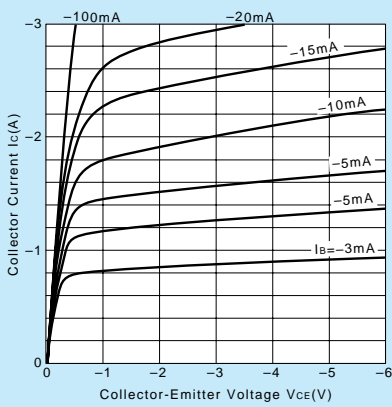
**Electrical Characteristics** (Ta=25°C)

Symbol	Conditions	SAH02	Unit
I <sub>CB0</sub>	V <sub>CB</sub> =-30V	-10max	μA
I <sub>EB0</sub>	V <sub>EB</sub> =-10V	-10max	μA
V(BR) <sub>CEO</sub>	I <sub>c</sub> =-10mA	-30min	V
h <sub>FE1</sub>	V <sub>CE</sub> =-2V, I <sub>c</sub> =-1A	100min	
h <sub>FE2</sub>	V <sub>CE</sub> =-2V, I <sub>c</sub> =-0.5A	150min	
V <sub>CE(sat)</sub>	I <sub>c</sub> =-0.5A, I <sub>B</sub> =-20mA	-0.3max	V
f <sub>r</sub>	V <sub>CE</sub> =-12V, I <sub>E</sub> =0.3A	100typ	MHZ
COB	V <sub>CB</sub> =-10V, f=1MHZ	45typ	pF

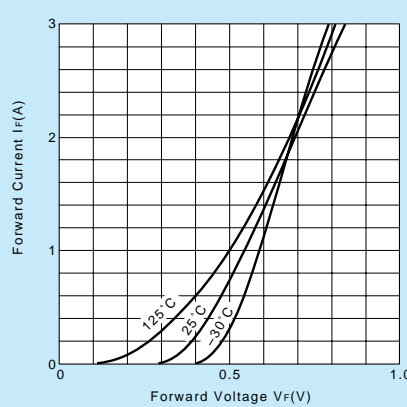
**External Dimensions PS Pack**



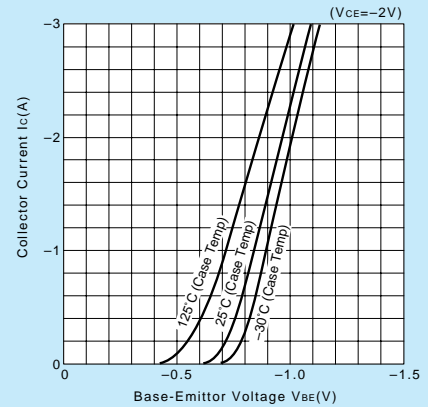
**I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)**



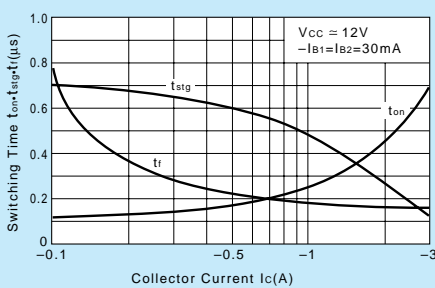
**Diode I<sub>F</sub>-V<sub>F</sub> Characteristics**



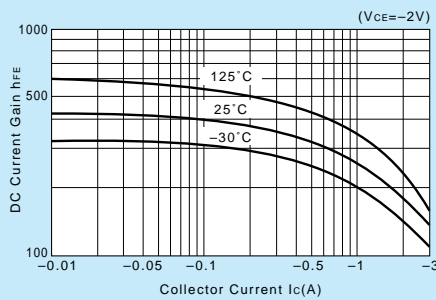
**I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)**



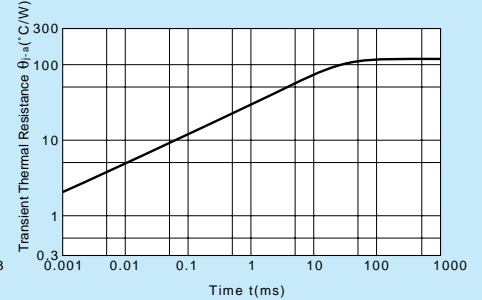
**t<sub>on</sub>•t<sub>stg</sub>•t<sub>r</sub>-I<sub>c</sub> Characteristics (Typical)**



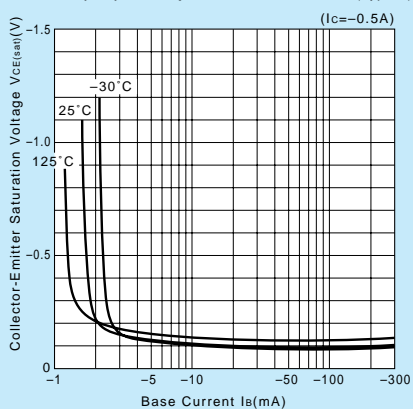
**h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)**



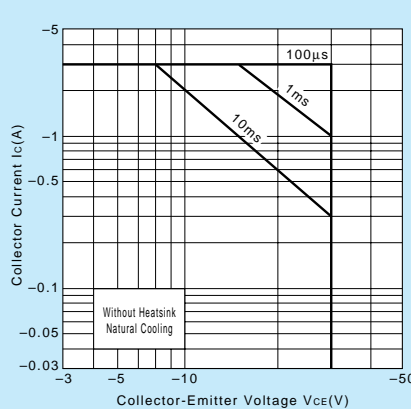
**θ<sub>j-a</sub>-t Characteristics**



**V<sub>CE(sat)</sub>-I<sub>B</sub> Temperature Characteristics (Typical)**



**Safe Operating Area (Single Pulse)**



**P<sub>c</sub>-T<sub>a</sub> Derating**

