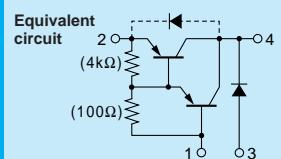


# SAH03



Silicon PNP Epitaxial Planar Transistor with Fast-Recovery Rectifier Diode

Application : Voltage change switch for motor

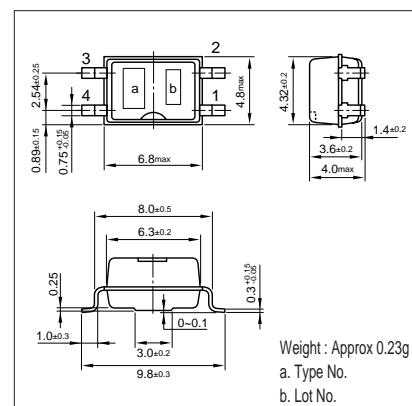
## Absolute maximum ratings (Ta=25°C)

Symbol	SAH03	Unit
V <sub>CBO</sub>	-60	V
V <sub>CEO</sub>	-60	V
V <sub>EBO</sub>	-6	V
I <sub>c</sub>	-1.2	A
I <sub>b</sub>	-0.1	A
P <sub>c</sub>	1.0(Ta=25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C

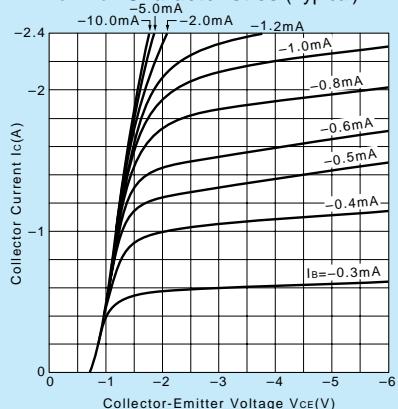
## Electrical Characteristics (Ta=25°C)

Symbol	Conditions	SAH03	Unit
I <sub>CBO</sub>	V <sub>CB</sub> =-60V	-10max	μA
I <sub>EBO</sub>	V <sub>EB</sub> =-6V	-3max	mA
V <sub>(BR)CEO</sub>	I <sub>c</sub> =-10mA	-60min	V
h <sub>FE</sub>	V <sub>CE</sub> =-4V, I <sub>c</sub> =-1A	2000 to 12000	
V <sub>CE(sat)</sub>	I <sub>c</sub> =-1A, I <sub>b</sub> =-2mA	-1.4max	V
f <sub>T</sub>	V <sub>CE</sub> =-12V, I <sub>e</sub> =0.1A	100typ	MHz
COB	V <sub>CB</sub> =-10V, f=1MHz	30typ	pF
V <sub>R</sub>	I <sub>r</sub> =100μA	100 min	V
V <sub>F</sub>	I <sub>r</sub> =0.5A	1.5 max	V
t <sub>rr</sub>	I <sub>r</sub> =±100mA	100 typ	ns

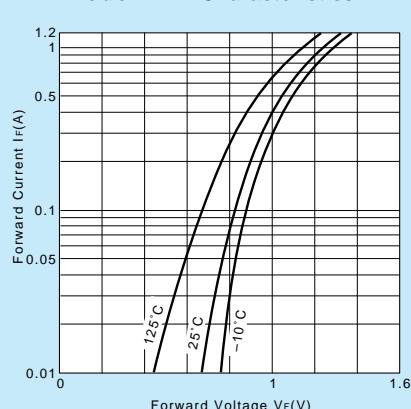
## External Dimensions PS Pack



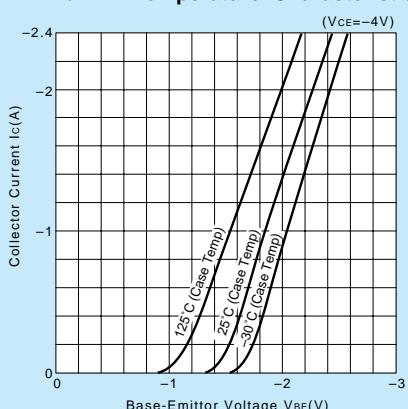
## I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



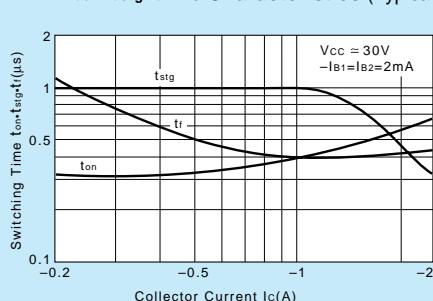
## Diode I<sub>F</sub>-V<sub>F</sub> Characteristics



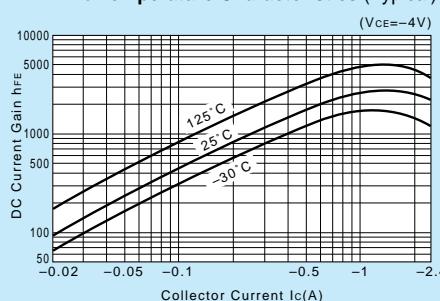
## I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



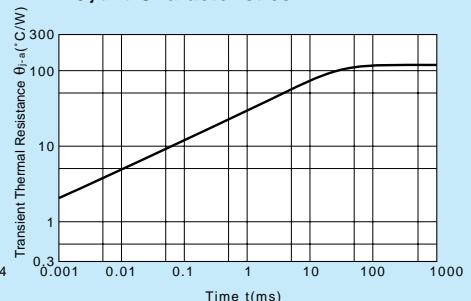
## t<sub>on</sub>=t<sub>stg</sub>=t<sub>f</sub>-I<sub>c</sub> Characteristics (Typical)



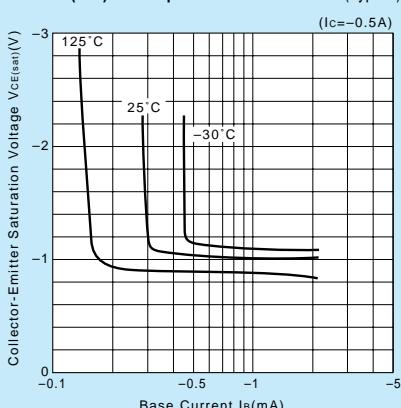
## h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



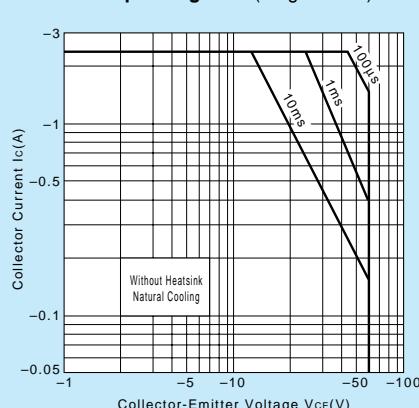
## θ<sub>j-a</sub>-t Characteristics



## V<sub>ce(sat)</sub>-I<sub>b</sub> Temperature Characteristics (Typical)



## Safe Operating Area (Single Pulse)



## Pc-Ta Derating

