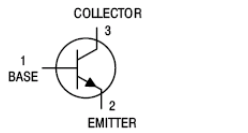
Silicon Epitaxial Planar Transistor **S9014W**

FEATURES

- Complementary To S9015W.
- Excellent H_{FE} Linearity.
- Power dissipation.(P_C=0.2W)

Lead-free





SOT-323

APPLICATIONS

- Per-Amplifier low level & low noise.

ORDERING INFORMATION

Type No.	Marking	Package Code
S9014W	J6	SOT-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	100	mA
P_C	Collector Dissipation	200	mW
T_j,T_{stg}	Junction and Storage Temperature	-55 to +150	℃

Silicon Epitaxial Planar Transistor **S9014W**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=0.1mA,I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=35V,I_B=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=3V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=5V,I_C=1mA	200		1000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B= 5mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B= 5mA			1	V
Transition frequency	f_T	V_{CE}=6V, I_C= 20mA f=30MHz		150		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	200-450	450-1000

Silicon Epitaxial Planar Transistor **S9014W**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

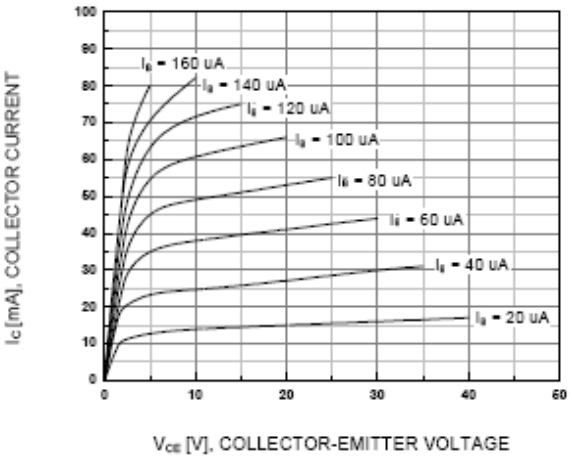


Figure 1. Static Characteristic

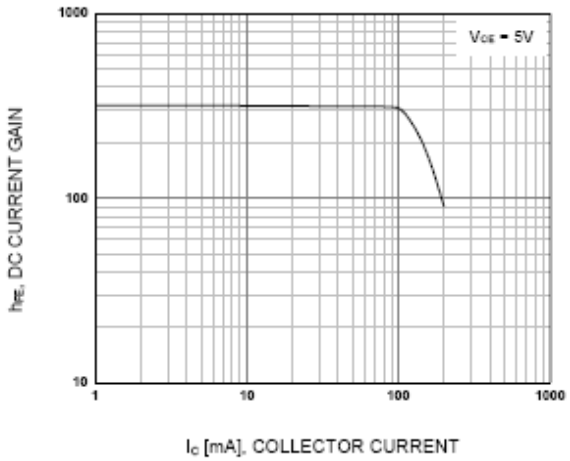


Figure 2. DC current Gain

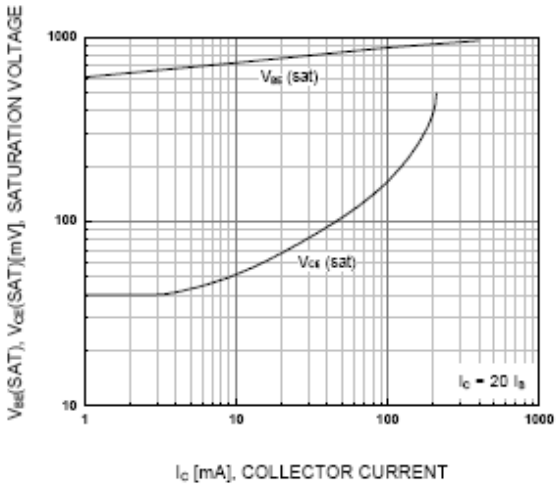


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

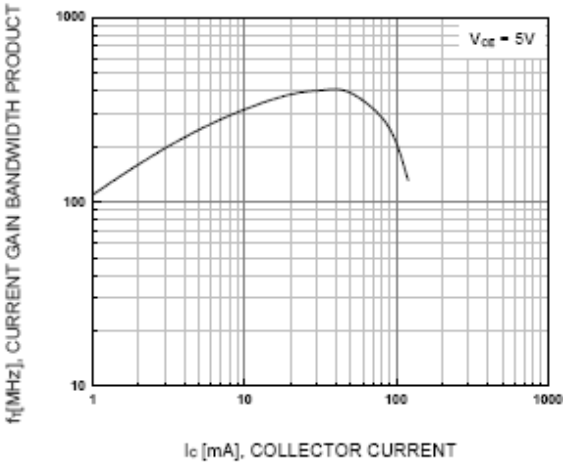
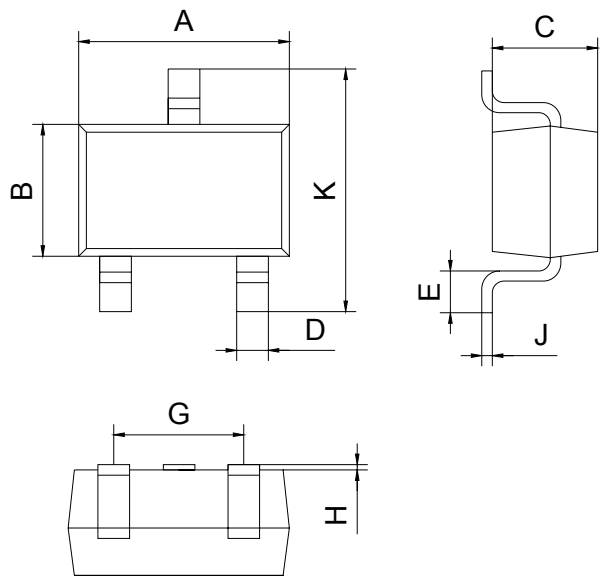


Figure 4. Current Gain Bandwidth Product

Silicon Epitaxial Planar Transistor **S9014W**

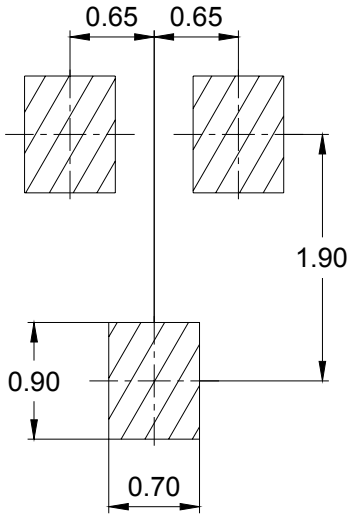
PACKAGE OUTLINE

Plastic surface mounted package SOT-323



SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.95 Typical	
D	0.30 Typical	
E	0.25	0.40
G	1.2	1.4
H	0.02	0.10
J	0.10 Typical	
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
S9014W	SOT-323	3000/Tape&Reel