



S9014

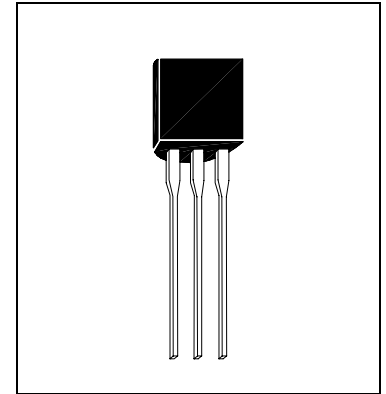
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The S9014 is designed for use in pre-amplifier of low level and low noise.

Features

- High Total Power Dissipation. (PD:450mW)
- Complementary to S9015
- High hFE and Good Linearity.



Absolute Maximum Ratings

- Maximum Temperatures
 - Storage Temperature -55~+150°C
 - Junction Temperature +150°C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Ta=25°C) 450 mW
- Maximum Voltages and Currents (Ta=25°C)
 - V_{CB0} Collector to Base Voltage 50 V
 - V_{CEO} Collector to Emitter Voltage 45 V
 - V_{EB0} Emitter to Base Voltage 5 V
 - I_C Collector Current 100 mA

Characteristics (Ta=25°C)

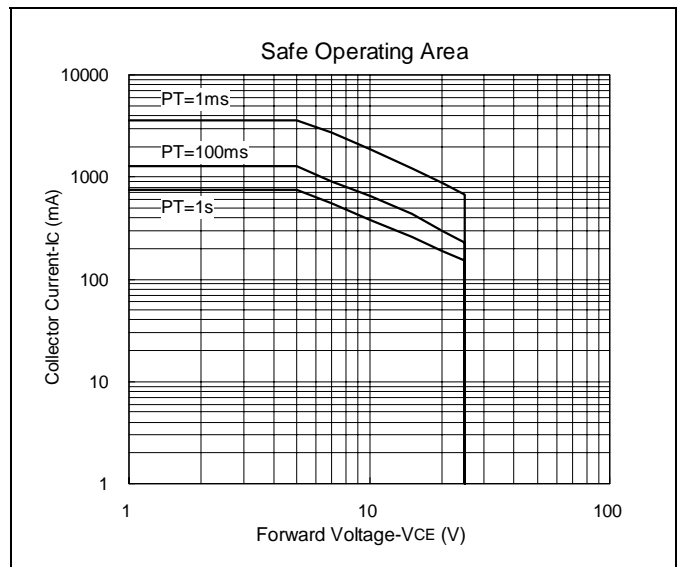
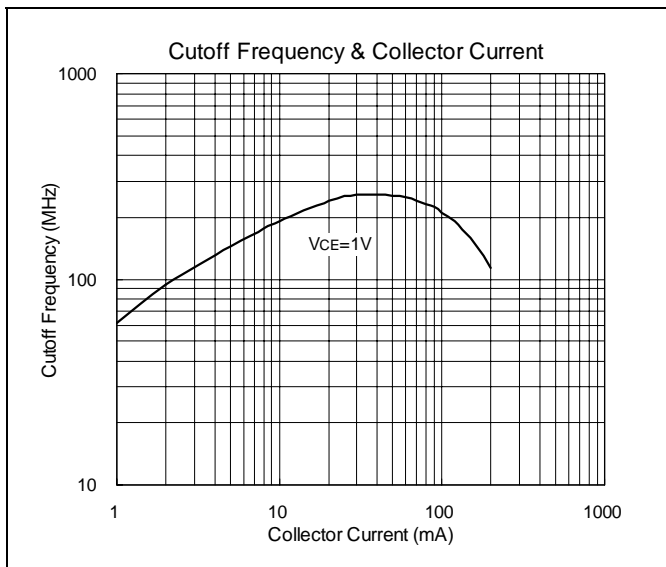
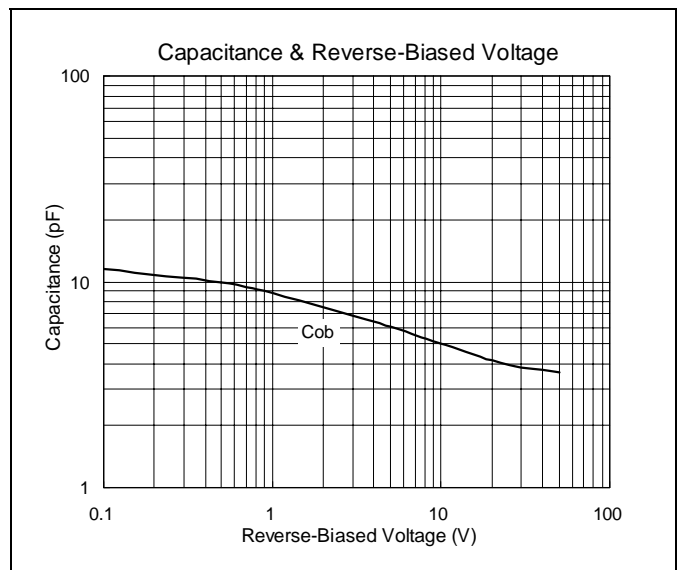
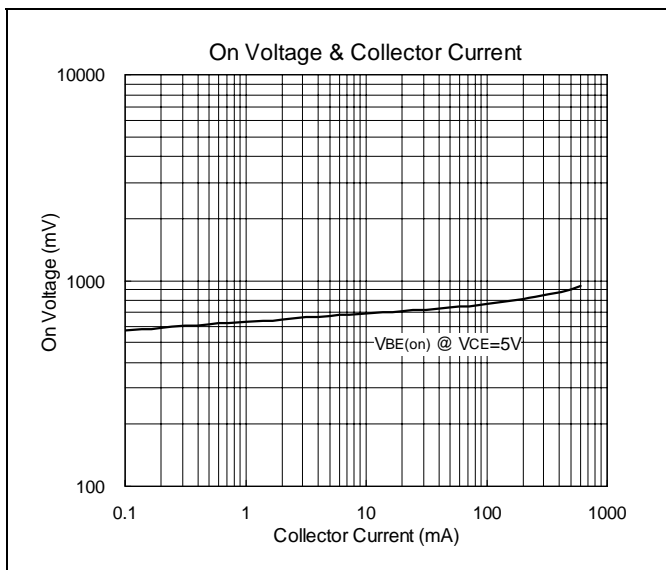
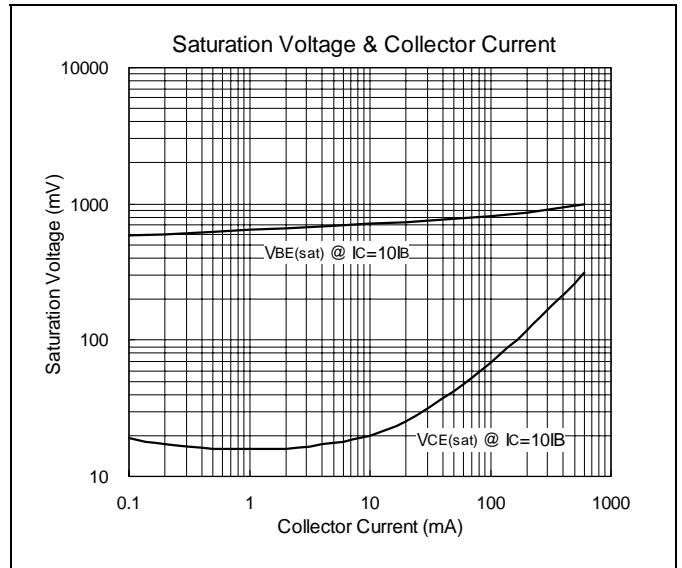
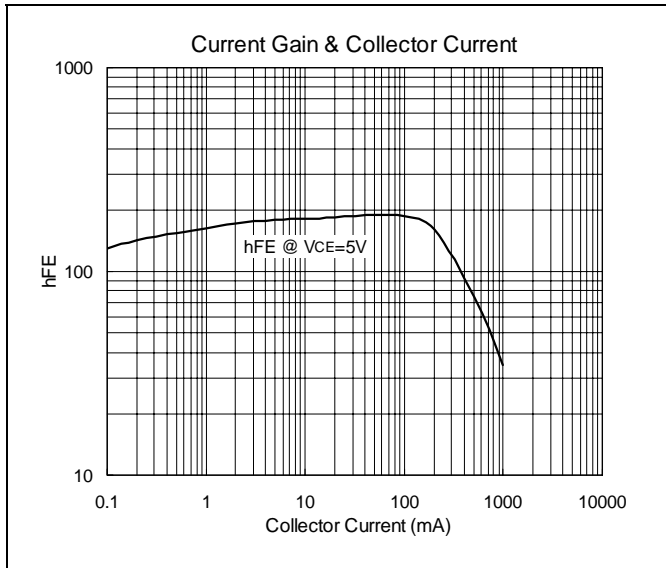
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
B _{VCBO}	50	-	-	V	I _C =100uA, I _E =0
B _{VCEO}	45	-	-	V	I _C =1mA, I _B =0
B _{VEBO}	5.0	-	-	V	I _E =100uA, I _C =0
I _{CB0}	-	-	50	nA	V _{CB} =50V, I _E =0
I _{EB0}	-	-	50	nA	V _{EB} =5V, I _C =0
V _{CE(sat)}	-	0.14	0.3	V	I _C =100mA, I _B =5mA
V _{BE(sat)}	-	0.84	1.0	V	I _C =100mA, I _B =5mA
V _{BE(on)}	0.58	0.63	0.7	V	V _{CE} =5V, I _C =2mA
h _{FE}	100	280	1000		V _{CE} =5V, I _C =1mA
C _{ob}	-	2.20	3.5	pF	V _{CB} =10V, f=1MHz, I _E =0
f _T	150	270	-	MHz	V _{CE} =5V, I _C =10mA

Classification on hFE

Rank	B	C	D
Range	100-300	200-600	400-1000

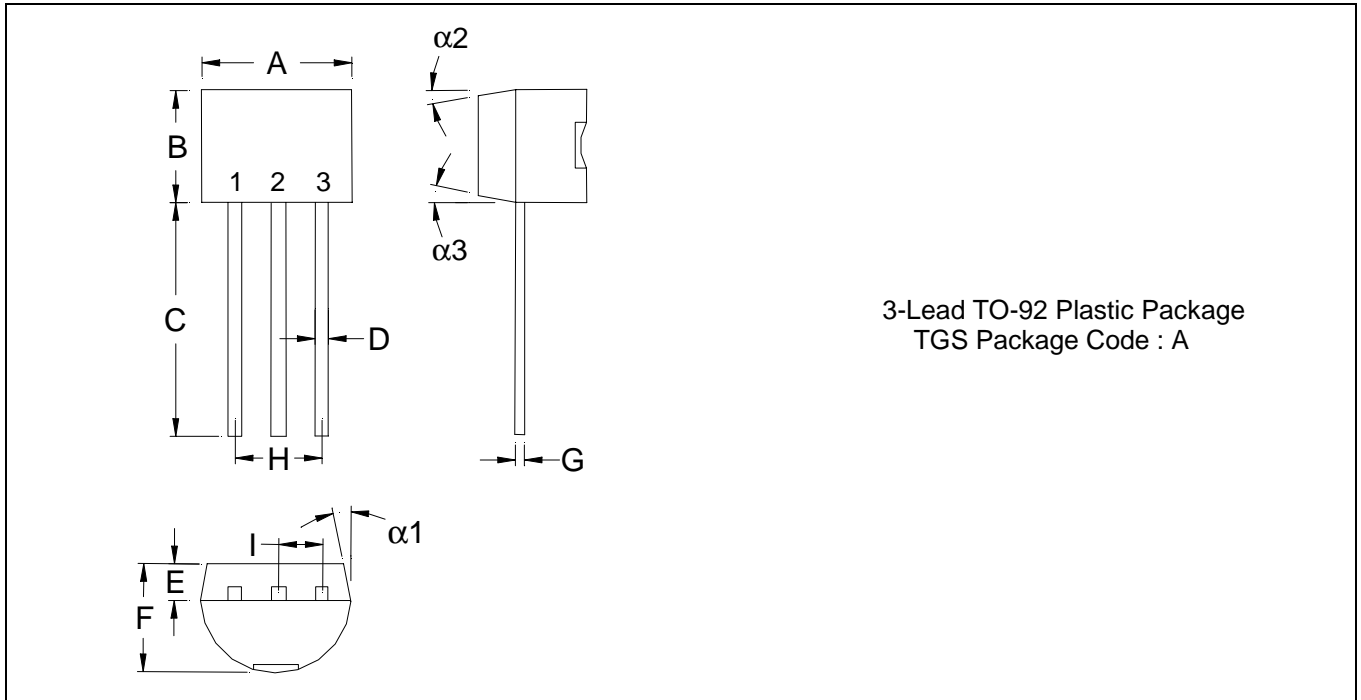


Characteristics Curve





TO-92 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°