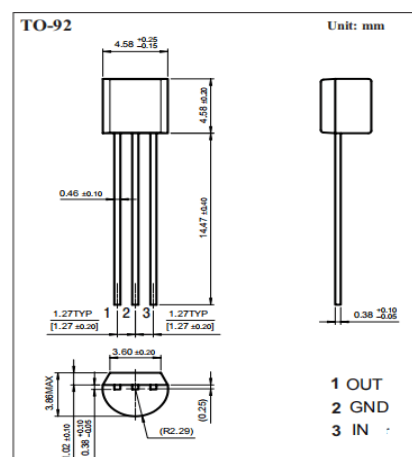


NPN Transistors

S9018

Features

- High current gain bandwidth product.
- power dissipation.(PC=200mW)



Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CB0}	30	V
Collector to Emitter Voltage	V _{CE0}	15	V
Emitter to Base Voltage	V _{EB0}	5	V
Collector Current to Continuous	I _c	50	mA
Collector Power Dissipation	P _c	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to 150	°C

Electrical Characteristics Ta = 25

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _c = 100 uA, I _E =0	30			V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _c = 1mA, I _B =0	15			V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E =100 uA, I _c =0	5			V
Collector cut to off current	I _{CBO}	V _{CB} =12V, I _E =0			0.05	uA
Emitter cut to off current	I _{EBO}	V _{EB} = 3V, I _c =0			0.1	uA
DC current gain	h _{FE}	V _{CE} =5V, I _c = 1mA	70		190	
Collector to emitter saturation voltage	V _{CE(sat)}	I _c =10mA, I _B = 1mA			0.5	V
Base to emitter saturation voltage	V _{BE(sat)}	I _c =10mA, I _B = 1mA			1.4	V
Transition frequency	f _T	V _{CE} =5V, I _c = 5mA, f=400MHz	600			MHz

Classification of h_{fe}

Type	KST9018-L	KST9018-H
Range	70-105	105-190
Marking	J8	