S9012

TO-92 Plastic-Encapsulate Transistors

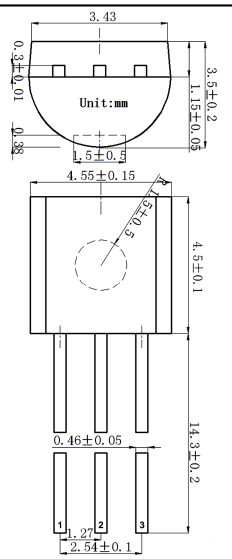
FEATURES

- Complementary to S9013
- Excellenth linearity
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

TO-92



1. Emitter
2. Base
3. Collector

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	-40	V
V_{CEO}	Collector Emitter Voltage	-25	V
V_{EBO}	Emitter Base Voltage	-5	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	625	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 ~ +150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = -100μA, I_E = 0	-40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = -1mA, I_B = 0	-25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = -100μA, I_C = 0	-5			V
I_{CBO}	Collector cut-off current	V_{CB} = -40V, I_E = 0			-100	nA
I_{CEO}	Collector cut-off current	V_{CE} = -20V, I_B = 0			-100	nA
I_{EBO}	Emitter cut-off current	V_{EB} = -5V, I_C = 0			-100	nA
$h_{FE(1)}$	DC current gain	V_{CE} = -1V, I_C = -50mA	200		300	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = -500mA, I_B = -50mA			-0.6	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = -500mA, I_B = -50mA			-1.2	V
f_T	Transition frequency	V_{CE}=-6V, I_C=-20mA, f=30MHz	150			MHz

RATINGS AND CHARACTERISTIC CURVES

Typical Characterisitics