

TO-92 Plastic-Encapsulate Transistors

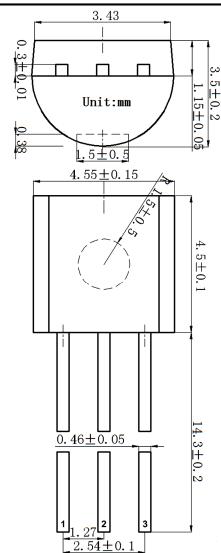
FEATURES

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

MECHANICAL DATA

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

TO-92



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 ($T_a=25^\circ\text{C}$ unless otherwise specified)

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

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

