

TO-92 Plastic-Encapsulate MOSFETS

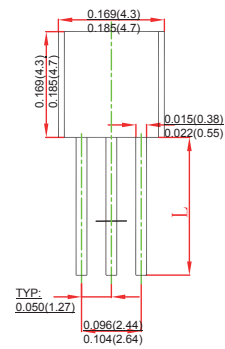
Features

- High Total Power Dissipation (PC = 0.45W)
- High hFE and Good Linearity
- Complementary to S9014
- PNP Transistors

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	-50	V
V_{CEO}	Collector Emitter Voltage	-45	V
V_{EBO}	Emitter Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	450	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	$I_C = -100\mu\text{A}$, $I_E = 0$	-50			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1\text{mA}$, $I_B = 0$	-45			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	$V_{CB} = -50\text{V}$, $I_E = 0$			-50	nA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5\text{V}$, $I_C = 0$			-50	nA
$h_{FE(1)}$	DC current gain	$V_{CE} = -5\text{V}$, $I_C = -1\text{mA}$	200		300	
$h_{FE(2)}$		$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$	90			
$h_{FE(3)}$		$V_{CE} = -5\text{V}$, $I_C = -50\text{mA}$	50			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$			-0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$			-1.0	V
f_T	Transition frequency	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$, $f = 30\text{MHz}$	100			MHz

Typical Characteristics

