

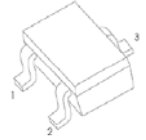
PNP Silicon Epitaxial Planar Transistor

FEATURES

- High voltage and high current
- Excellent h_{FE} linearity
- Complementary to 2SC4738T

SOT-523

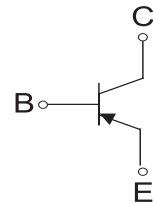
1. BASE
2. EMITTER
3. COLLECTOR



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-150	mA
P_D	Total Device Dissipation	100	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	125	$^\circ\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55 to +125	$^\circ\text{C}$

Equivalent Circuit



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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=-100\mu\text{A}, I_E=0$	-50			V
Collector-emitter breakdown voltage	V_{CEO}^*	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-50\text{V}, I_E=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC current gain	h_{FE}	$V_{CE}=-6\text{V}, I_C=-2\text{mA}$	120		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.3	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-1\text{mA}$	80			MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		4	7	pF

CLASSIFICATION OF h_{FE}

Rank	Y	GR
Range	120-240	200-400
Marking	SY	SG

Typical Characteristics

