

SOT-23 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

- High Transition Frequency
- Complementary to 2SC2983

APPLICATIONS

- Power Amplifier Applications
- Driver Stage Amplifier Applications

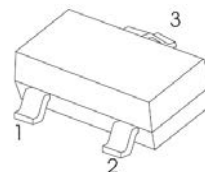
MARKING : 12250,1225Y

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

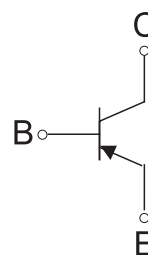
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1.5	A
P_C	Collector Power Dissipation	0.35	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



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	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-10\text{mA}, I_B=0$	-160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1\text{mA}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=160\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-5\text{V}, I_C=-0.1\text{A}$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-0.5\text{A}, I_B=-50\text{mA}$			-1.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=-5\text{V}, I_C=-0.5\text{A}$			-1	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-100\text{mA}$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		30		pF

* Pulse test

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	70-140	120-240

Typical Characteristics

