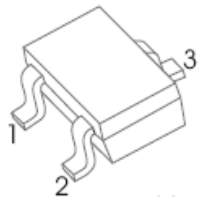
TRANSISTOR(PNP)

FEATURES

- High DC Current Gain
- High Voltage
- Complementary to 2SC4177

SOT－323



1. BASE
2. EMITTER
3. COLLECTOR

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-100	mA
P_C	Collector Power Dissipation	150	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	833	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55～+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA, I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-100	nA
DC current gain	h_{FE}*	V_{CE}=-6V, I_C=-1mA	90		600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA			-0.3	V
Collector-emitter voltage	V_{BE}	V_{CE}=-6V, I_C=-1mA	-0.58		-0.68	V
Transition frequency	f_T	V_{CE}=-6V,I_c=-10mA		180		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		4.5		pF

*Pulse test: pulse width ≤350μs, duty cycle≤ 2.0%.

CLASSIFICATION OF h_{FE}

RANK	M4	M5	M6	M7
RANGE	90－180	135－270	200－400	300－600
MARKING	M4	M5	M6	M7