

PNP SILICON TRANSISTOR

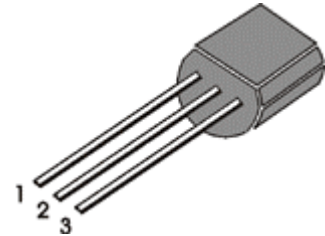
■ Description

- General Purpose Application
- Amplifier Application

■ Features

- High Voltage and High Current ($V_{CE0}=-50V$, $I_C=-150mA$)
- Excellent h_{FE} Linearity
- Low Noise: $NF=1dB$
- Complementary to TSC1815

TO-92



1.Emitter 2.Collector 3.Base

■ ABSOLUTE MAXIMUM RATINGS

($T_A=25^{\circ}C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-150	mA
Base Current	I_B	-50	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 ~ 150	$^{\circ}C$

■ ELECTRICAL CHARACTERISTICS

($T_A=25^{\circ}C$)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=-50V$, $I_E=0$			-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=-6V$, $I_C=-2mA$	70		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA$, $I_B=-10mA$		-0.1	-0.3	V
Base-Emitter Voltage	$V_{BE(sat)}$	$I_C=-100mA$, $I_B=-10mA$			-1.1	V
Transistor Frequency	f_T	$V_{CE}=-10V$, $I_E=1mA$	80			MHz
Noise Figure	NF	$V_{CE}=-6V$, $I_C=-0.1mA$, $R_G=10K\Omega$		1	10	dB
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$		2	3.5	pF

h_{FE} CLASSIFICATION

Classification	O	Y	GR
h_{FE}	70 – 140	120 – 240	200 – 400