

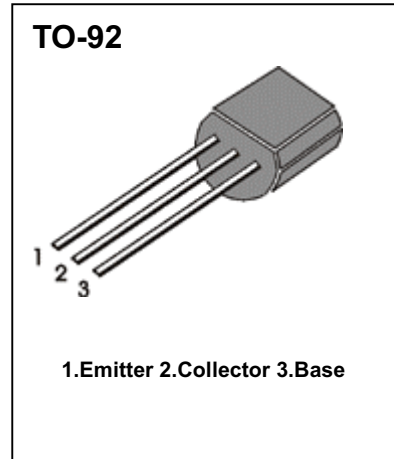
## PNP SILICON TRANSISTOR

**■ 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


**■ 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	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V$ , $I_C=0$			-0.1	$\mu A$
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