

SILICON PNP TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

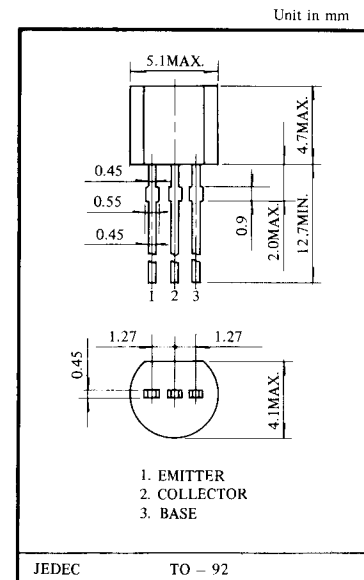
2SA1271

APPLICATIONS

- Low Frequency Power Amplifiers
(B-Class Push-pull, $P_o=1W$)
- General Purpose Switching Circuits

FEATURES

- Excellent h_{FE} vs. Collector Current Characteristics
- $P_c=600mW$, $I_c=-800mA$ max
- $V_{CE(sat.)}=-0.7V$ max. at $I_c=-500mA$, $I_b=-20mA$
- Complementary to the 2SC3203



MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector - Base Voltage	V_{CB0}	-35	V
Collector - Emitter Voltage	V_{CE0}	-30	V
Emitter - Base Voltage	V_{EB0}	-5	V
Collector - Current	I_c	-800	mA

CHARACTERISTIC	SYMBOL	RATING	UNIT
Emitter Current	I_E	800	mA
Collector Power Dissipation	P_c	600	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	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_{CB0}	$V_{CB}=-35V$, $I_E=0$	-	-	-100	nA
Emitter Cut off Current	I_{EB0}	$V_{EB}=-5V$, $I_c=0$	-	-	-100	nA
Collector - Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_c=-10mA$	-30	-	-	V
DC Current Gain (1)	$h_{FE(1)}$	$V_{CE}=-1V$, $I_c=-100mA$	100	-	320	
DC Current Gain (2)	$h_{FE(2)}$	$V_{CE}=-1V$, $I_c=-700mA$	35	-	-	
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c=-500mA$, $I_b=-20mA$	-	-	-0.7	V
Base - Emitter Voltage	V_{BE}	$V_{CE}=-1V$, $I_c=-10mA$	-0.5	-	-0.8	V
Transition Frequency	f_T	$V_{CE}=-5V$, $I_c=-10mA$	-	120	-	MHz
Output Capacitance	C_{ob}	$V_{CB}=-10V$, $f=1MHz$	-	19	-	pF

NOTE: According to $h_{FE(1)}$, Classified as follows

0	100~200	Y	160 - 320
---	---------	---	-----------