

SILICON PNP TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

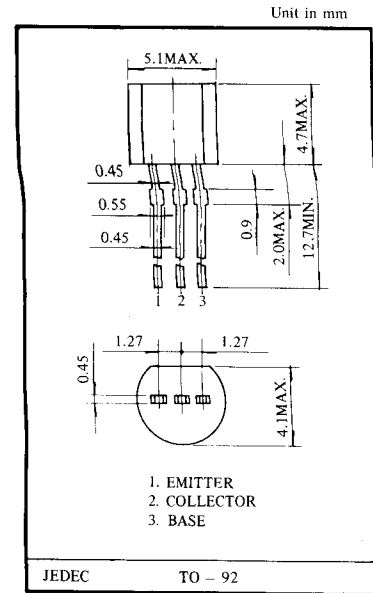
2SA1270

APPLICATIONS

- Low Frequency, Low Power Amplifiers
- General-driver Stage Amplifiers
- General Purpose Switching Applications

FEATURES

- Excellent h_{FE} vs. Collector Current Characteristics,
 $h_{FE}(2) = 25$ min. at
 $V_{CE} = -6V, I_C = -400mA$
- $I_C = \text{max.} = -500mA$
- $P_C = \text{max.} = 500mW$
- Complementary to the 2SC 3202



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

CHARACTERISTIC	SYMBOL	RATING	UNIT	CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector - Base Voltage	V_{CBO}	-35	V	Emitter Current	I_E	500	mA
Collector - Emitter Voltage	V_{CEO}	-30	V	Collector Power Dissipation	P_C	500	mW
Emitter - Base Voltage	V_{EBO}	-5	V	Junction Temperature	T_j	150	$^\circ C$
Collector Current	I_C	-500	mA	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_{CBO}	$V_{CB} = -35V, I_E = 0$	-	-	-0.1	μA
Emitter Cut off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-0.1	μA
DC Current Gain(1)	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	70	-	240	
DC Current Gain(2)	$h_{FE(2)}$ (Pulsed)	$V_{CE} = -6V, I_C = -400mA$	25	-	-	
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$	-	-0.1	-0.25	V
Base - Emitter Voltage	V_{BE}	$I_C = -100mA, V_{CE} = -1V$	-	-0.8	-1.0	V
Transition Frequency	f_T	$V_{CE} = -6V, I_E = 20mA$	-	200	-	MHz
Output Capacitance	C_{ob}	$V_{CB} = -6V, I_E = 0, f = 1MHz$	-	13	-	pF

■ Note: According to $h_{FE}(1)$ Classified as follows

0	70~140	Y	120~240
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