

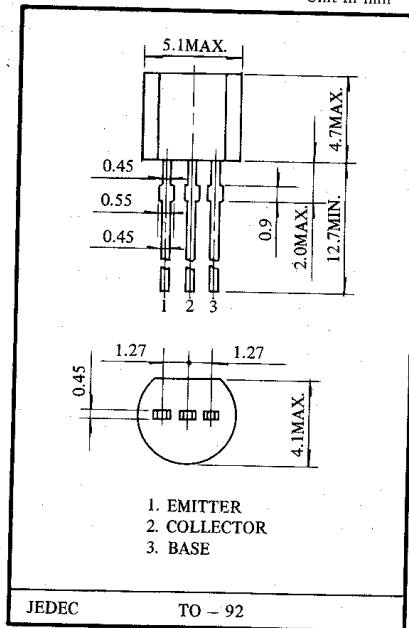
SILICON NPN TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

2SC3202

APPLICATIONS

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

Unit in mm



- Excellent h_{FE} vs. Collector Current Characteristics,
 $h_{FE}(2) = 25\text{min. at } V_{CE}=6V, I_C=400\text{mA}$
- $I_C \text{ max.} = 500\text{mA}$
- $P_C \text{ max.} = 500\text{mW}$
- Complementary to the 2SA1270

■ MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector - Base Voltage	V_{CBO}	35	V
Collector - Emitter Voltage	V_{CEO}	30	V
Emitter - Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA

CHARACTERISTIC	SYMBOL	RATING	UNIT
Emitter Current	I_E	-500	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

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)	$h_{FE}(1)$	$V_{CE}=1V, I_C=100\text{mA}$	70	-	240	
DC Current Gain (2)	$h_{FE}(2)$ (Pulsed)	$V_{CE}=6V, I_C=400\text{mA}$	25	-	-	
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	0.1	0.25	V
Base - Emitter Voltage	V_{BE}	$I_C=100\text{mA}, V_{CE}=1V$	-	0.8	0.1	V
Transition Frequency	f_T	$V_{CE}=6V, I_E=-20\text{mA}$	-	300	-	MHz
Output Capacitance	C_{ob}	$V_{CB}=6V, I_E=0, f=1\text{MHz}$	-	7	-	pF

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

0	70 - 140	Y	120 ~ 240
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