

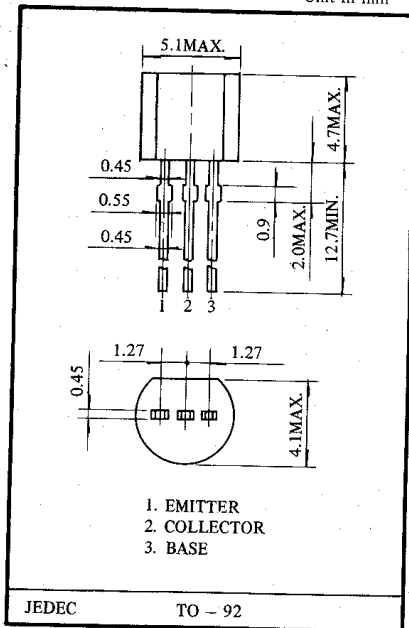
SILICON NPN TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

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,
 $h_{FE}(2) = 25$ min. at $V_{CE} = 6V$, $I_C = 400mA$
- I_C max. = 500mA
- P_C max. = 500mW
- Complementary to the 2SA 1270

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

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	$^\circ C$
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_{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	0.1	V
Transition Frequency	f_T	$V_{CE} = 6V$, $I_E = -20mA$	-	300	-	MHz
Output Capacitance	C_{ob}	$V_{CB} = 6V$, $I_E = 0$, $f = 1MHz$	-	7	-	pF

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

0	70-140	Y	120~240
---	--------	---	---------