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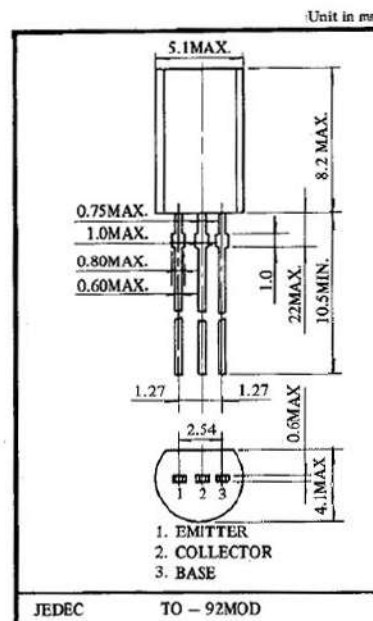
SILICON NPN TRANSISTOR TRIPLE DIFFUSED TYPE (PCT PROCESS)

APPLICATIONS

- Black and White TV Video Output Applications.
- High Voltage Switching Applications.
- Driver Stage Audio Amplifier Applications.

FEATURES

- High V_{CE0} : $V_{CE0} = 150\text{ V}$
- High f_T : $f_T = 120\text{ MHz (Typ)}$
- Low C_{ob} : $C_{ob} = 5.0\text{ pF (Max)}$



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

CHARACTERISTIC	SYMBOL	RATING	UNIT	CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	200	V	Emitter Current	I_E	-50	mA
Collector-Emitter Voltage	V_{CE0}	150	V	Collector Dissipation	P_C	800	mW
Emitter-Base Voltage	V_{EB0}	5	V	Junction Temperature	T_j	150	$^\circ\text{C}$
Collector Current	I_C	50	mA	Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cutoff Current	I_{CB0}	$V_{CB} = 200\text{ V}, I_E = 0$	—	—	0.1	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 10\text{ mA}$	70	—	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA}, I_B = 1\text{ mA}$	—	—	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{ mA}, I_B = 1\text{ mA}$	—	—	1	V
Transition Frequency	f_T	$V_{CE} = 30\text{ V}, I_C = 10\text{ mA}$	—	120	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	3.5	5	pF

■ NOTE: According to h_{FE} , Classified as follows.

0	70—140	Y	120—240
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