
2SC1921

Silicon NPN Triple Diffused

HITACHI

ADE-208-1060 (Z)

1st. Edition

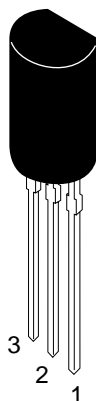
Mar. 2001

Application

- High frequency high voltage amplifier
- Video output

Outline

TO-92MOD



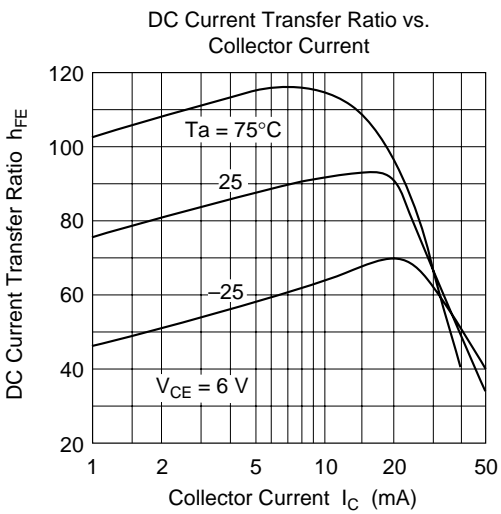
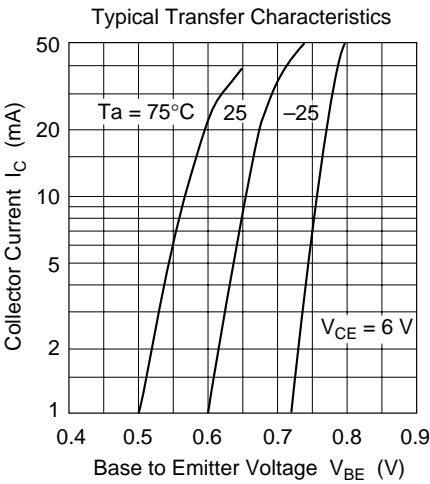
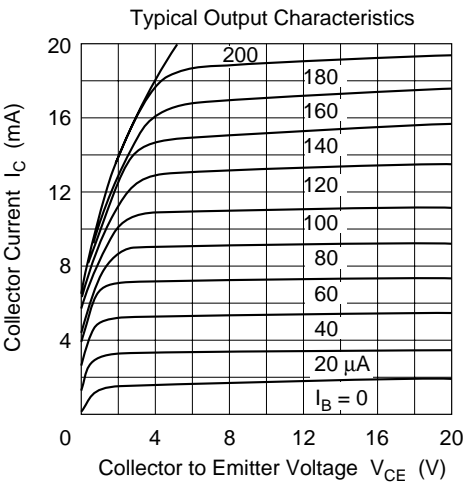
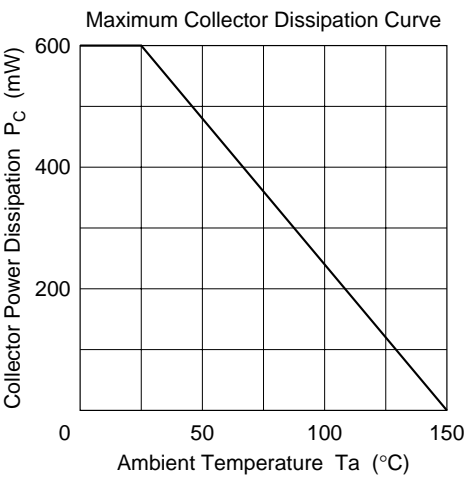
1. Emitter
2. Collector
3. Base

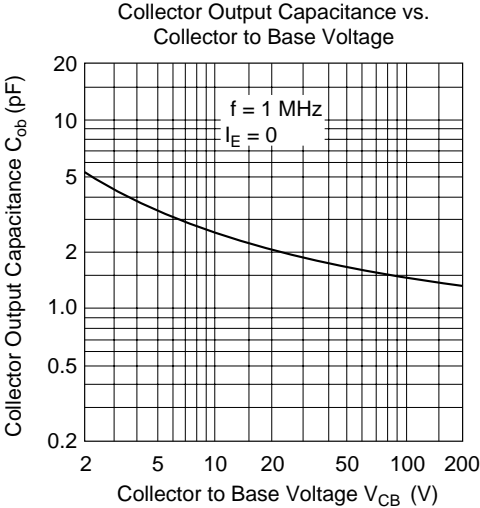
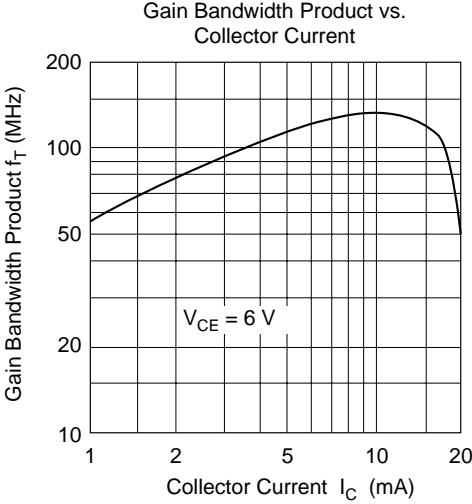
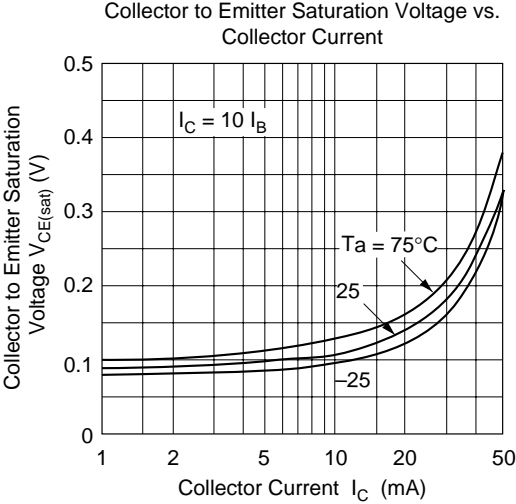
Absolute Maximum Ratings ($T_a = 25^{\circ}\text{C}$)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	250	V
Collector to emitter voltage	V_{CEO}	200	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_{C}	50	mA
Collector power dissipation	P_{C}	600	mW
Junction temperature	T_{j}	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a = 25^{\circ}\text{C}$)

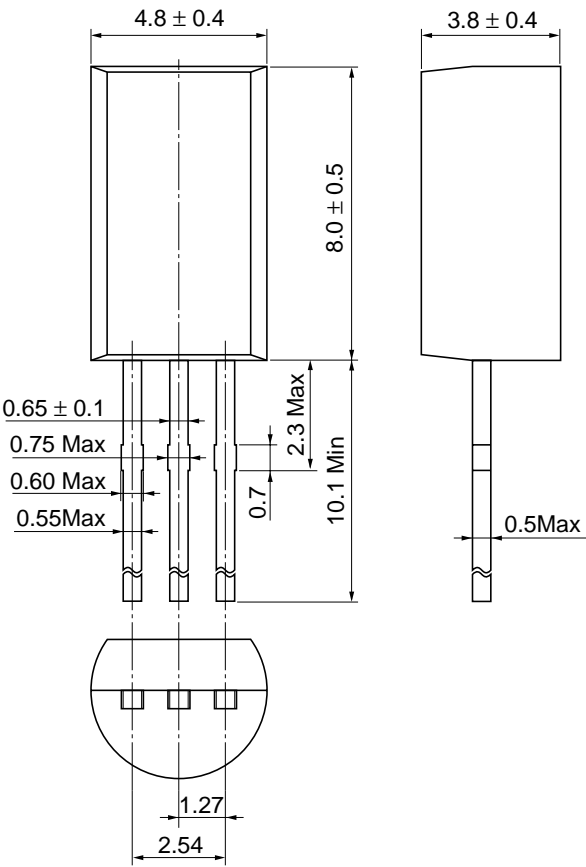
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	250	—	—	V	$I_{\text{C}} = 10\text{ }\mu\text{A}$, $I_{\text{E}} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	200	—	—	V	$I_{\text{C}} = 1\text{ mA}$, $R_{\text{BE}} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	5	—	—	V	$I_{\text{E}} = 10\text{ }\mu\text{A}$, $I_{\text{C}} = 0$
Collector cutoff current	I_{CEO}	—	—	1.0	μA	$V_{\text{CE}} = 120\text{ V}$, $R_{\text{BE}} = \infty$
DC current transfer ratio	h_{FE}	30	—	300		$V_{\text{CE}} = 6\text{ V}$, $I_{\text{C}} = 10\text{ mA}$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	1.0	V	$I_{\text{C}} = 10\text{ mA}$, $I_{\text{B}} = 1\text{ mA}$
Gain bandwidth product	f_{T}	60	130	—	MHz	$V_{\text{CE}} = 6\text{ V}$, $I_{\text{C}} = 10\text{ mA}$
Collector output capacitance	C_{ob}	—	3	4	pF	$V_{\text{CB}} = 6\text{ V}$, $I_{\text{E}} = 0$, $f = 1\text{ MHz}$





Package Dimensions

As of January, 2001
Unit: mm



Hitachi Code	TO-92 Mod
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.35 g

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