
2SD2651

Silicon NPN Epitaxial
High Voltage Amplifier

HITACHI

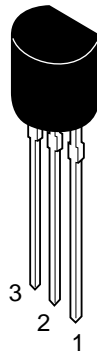
ADE-208-976 (Z)
1st. Edition
October 2000

Features

- High breakdown voltage
 $V_{CEO} = -300V$ min

Outline

TO-92 (1)



1. Emitter
2. Collector
3. Base

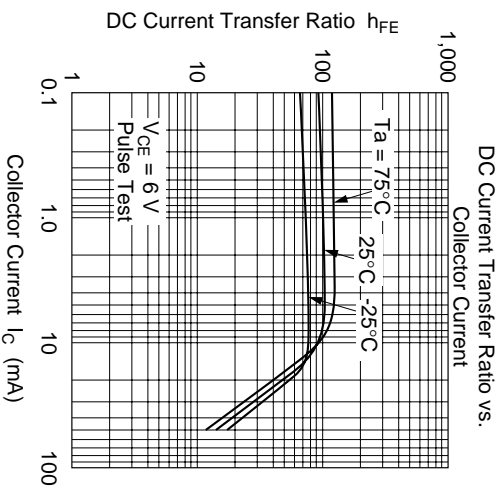
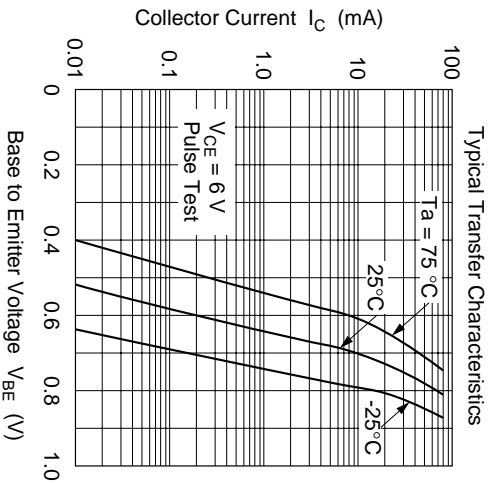
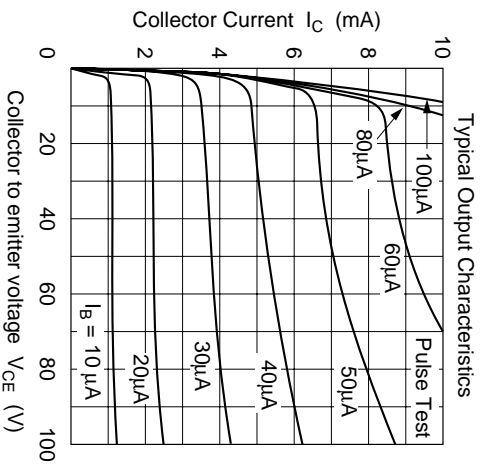
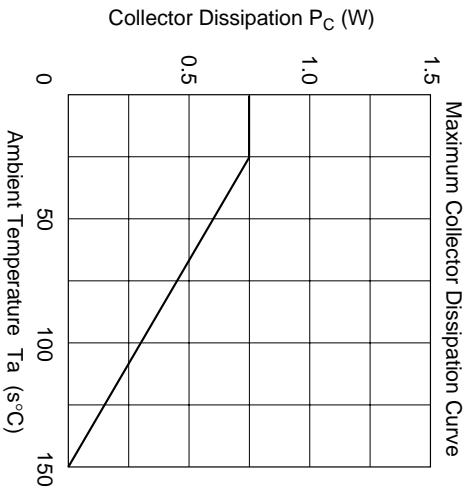
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Rated	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	750	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

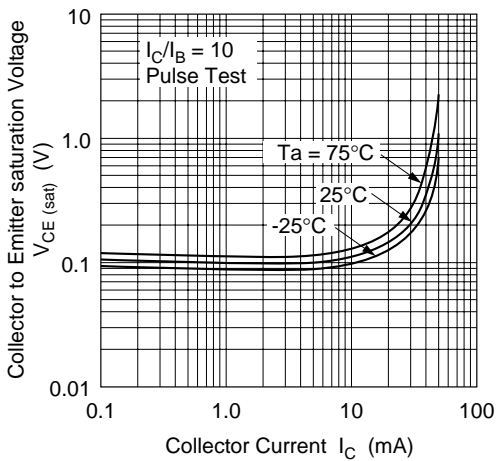
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{CB} = 300\text{V}, I_E = 0$
	I_{CEO}	—	—	0.1	μA	$V_{CB} = 300\text{V}, R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	10	μA	$V_{EB} = 5\text{V}, I_C = 0$
Base to emitter voltage	V_{BE}	—	—	0.75	V	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$
DC current transfer ratio	h_{FE}	80	—	160	—	$V_{CE} = 6\text{V}, I_C = 2\text{mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.5	V	$I_C = 30\text{mA}, I_B = 3\text{mA}$

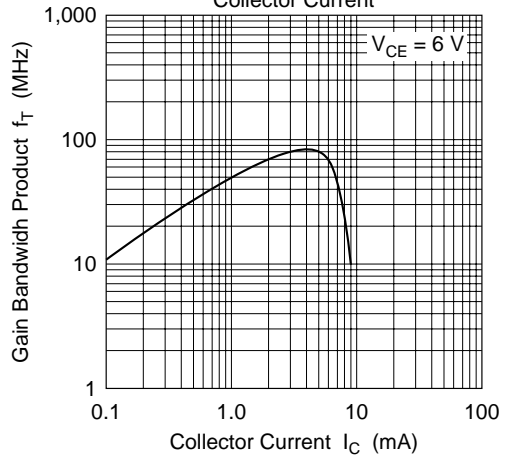
Main Characteristics



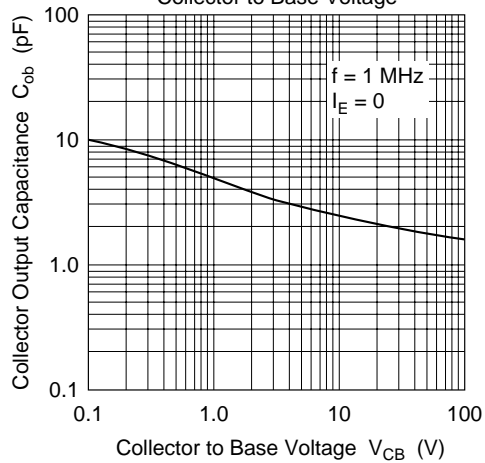
Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current

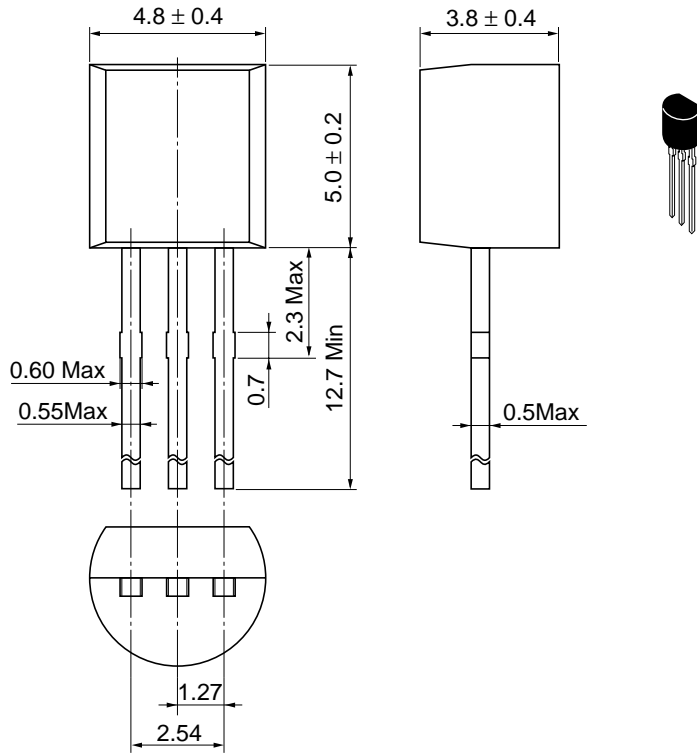


Collector Output Capacitance vs. Collector to Base Voltage



Package Dimensions

As of January, 2001
Unit: mm



Hitachi Code	TO-92 (1)
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.25 g

Cautions

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