

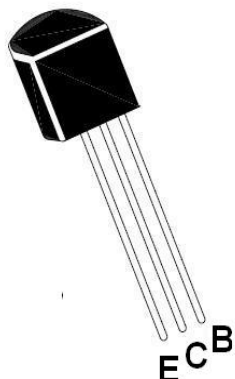


Continental Device India Pvt. Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



SILICON PNP EPITAXIAL PLANER TYPE TRANSISTOR



CSB976

TO-92

Plastic Package

Applications

For low-frequency output amplification

For DC-DC converter

For Stroboscope

Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Large collector current I_C

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to base voltage	V_{CBO}	27	V
Collector to emitter voltage	V_{CEO}	18	V
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	8	A
Collector current	I_C	5	A
Collector power dissipation	P_C	0.75	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	$^\circ\text{C}$



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

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Collector cutoff current	I_{CBO}	$V_{CB} = 10V, I_E = 0$			100	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1	μA
Collector to emitter voltage	V_{CEO}	$I_C = 1mA, I_B = 0$	18			V
Emitter to base voltage	V_{EBO}	$I_E = 10\mu A, I_C = 0$	7			V
Forward current transfer ratio	h_{FE}^1	$V_{CE} = 2V, I_C = 2A^2$	125		625	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 0.1A^2$		0.4	1	V
Transition frequency	f_T	$V_{CB} = 6V, I_E = 50mA, f = 200MHz$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 20V, I_E = 0, f = 1MHz$		60		pF

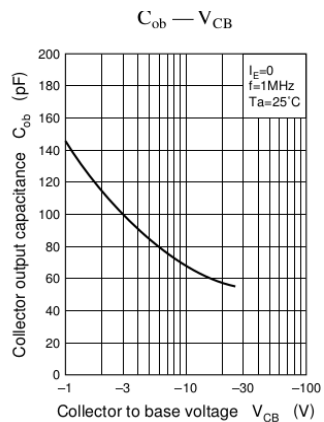
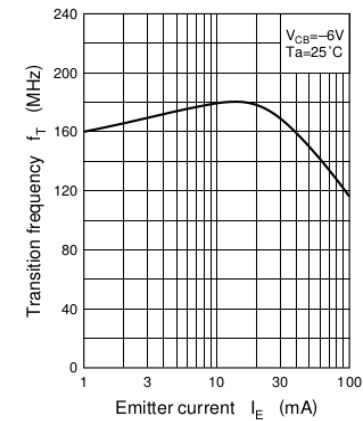
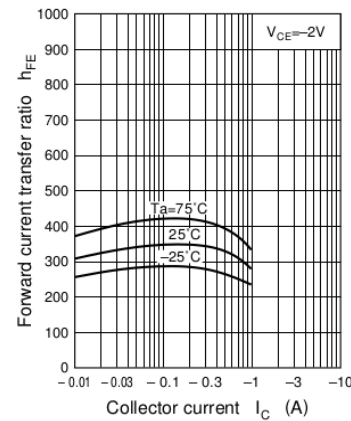
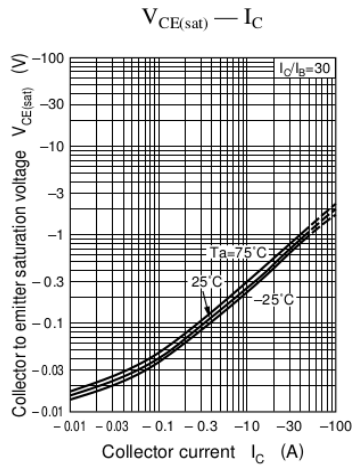
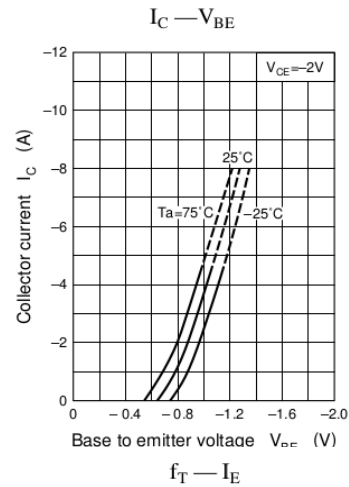
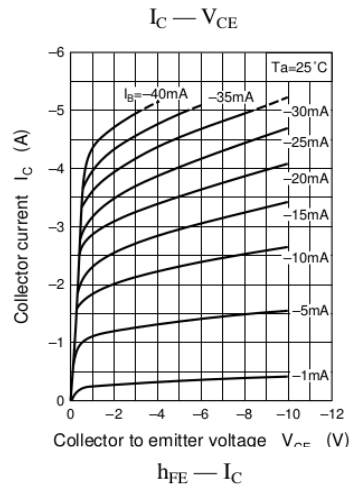
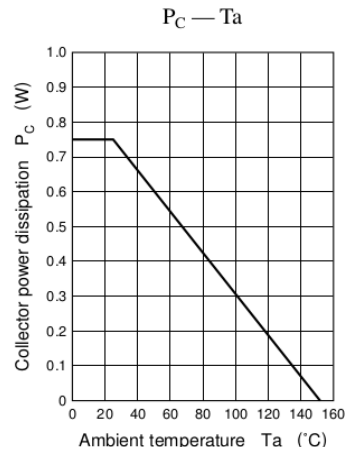
Note

1. h_{FE} Rank classification

RANK	Q	R
h_{FE}	125 ~ 205	180 ~ 625

2. Pulse measurement

CHARACTERISTIC CURVES



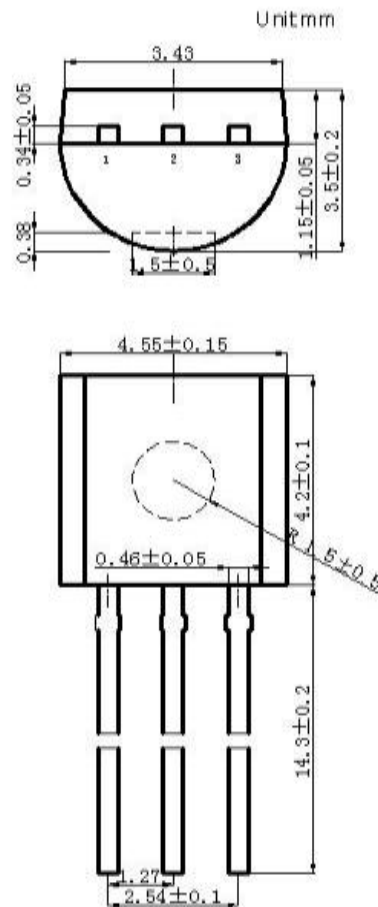


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TO-92 PACKAGE OUTLINE AND DIMENSIONS



1. EMITTER
2. COLLECTOR
3. BASE



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Customer Notes

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

DISCLAIMER

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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Continental Device India Pvt. Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdil.com

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