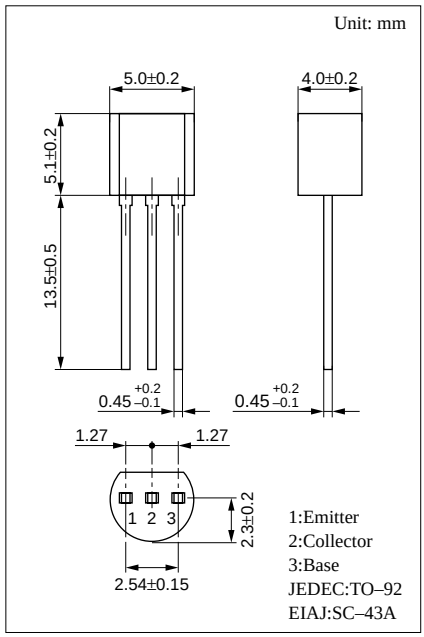
2SD1302

Silicon NPN epitaxial planer type

For low-voltage output amplification
For muting
For DC-DC converter



Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$.
- Low ON resistance R_{on}.
- High foward current transfer ratio h_{FE}.

Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	12	V
Peak collector current	I_{CP}	1	A
Collector current	I_C	0.5	A
Collector power dissipation	P_C	600	mW
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	–55 ~ +150	˚C

Electrical Characteristics (Ta=25˚C)

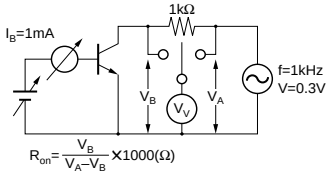
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 25V, I_E = 0			100	nA
Collector to base voltage	V_{CBO}	I_C = 10μA, I_E = 0	25			V
Collector to emitter voltage	V_{CEO}	I_C = 1mA, I_B = 0	20			V
Emitter to base voltage	V_{EBO}	I_E = 10μA, I_C = 0	12			V
Forward current transfer ratio	h_{FE1} *1	V_{CE} = 2V, I_C = 0.5A*2	200		800	
	h_{FE2}	V_{CE} = 2V, I_C = 1A*2	60			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.5A, I_B = 20mA		0.13	0.4	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = 0.5A, I_B = 50mA			1.2	V
Transition frequency	f_T	V_{CB} = 10V, I_E = –50mA, f = 200MHz		200		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz		10		pF
ON resistanse	R_{on} *3			1.0		Ω

*2 Pulse measurement

*1 h_{FE1} Rank classification

Rank	R	S	T
h_{FE1}	200 ~ 350	300 ~ 500	400 ~ 800

*3 R_{on} Measurement circuit



“Searchdatasheets provides users with one of the Internet’s most complete sources for obsolete datasheets,” said Ariel Zriel, President, Market Maker Systems.
As the life-cycle of components is shortened by the constant demand for faster and better technology, electronics parts are being rendered obsolete at an unprecedented rate. Searchdatasheets gathers and stores the fact sheets, which explain how to use those components.

“Once a component manufacturer decides to eliminate a component datasheet from its web site,” said Zriel, “we take over and list it along with the millions of other datasheets that our users can quickly access.”

Users can perform standard searches for datasheets, or use the cross-reference search option if they want to find a compatible part from another manufacturer.
Searchdatasheets also informs its users when parts are going to become obsolete, providing them with timely product change notification (PCN), product discontinuation notices (PDN) and end of life (EOL) notification.

Searchdatasheets is the only database of its kind that has components engineers onstaff.

That means users can count on assistance from qualified personnel when performing cross-reference searches. Searchdatasheets engineers also regularly research and add and new datasheets to the system.

“We have full-time Engineers on-staff to research and add datasheets if the information is not currently on our site,” said Zriel. “We are providing a place for users to have their questions answered quickly. Our aim is to build a community for components engineers who need help in product design.”

For information or to contact us:

Market Maker Systems Canada
Phone: 1-514-333-1245
Fax: 1-514-333-1489
Email: sales@searchdatasheets.com

SEARCHDATASHEETS.COM
ELECTRONIC COMPONENTS RESEARCH DATABASE