

2SD1645

查询"2SD1645"供应商

Silicon NPN Epitaxial Planar Darlington Type

AF Amplifier

■ Features

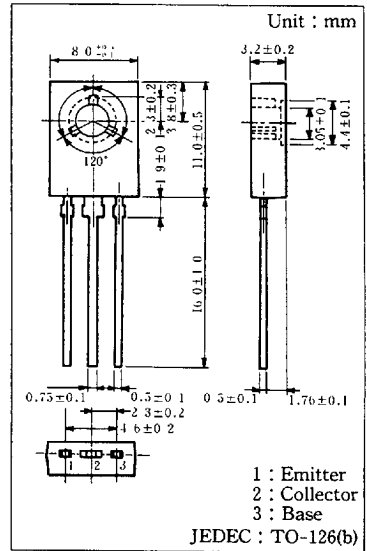
- 60V Zener diode between built-in C and B, C and E
- Very small fluctuations in breakdown voltage
- Darlington connection
- High DC current gain (h_{FE})

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

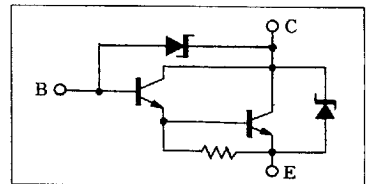
Item	Symbol	Value	Unit
Collector-base voltage	V_{CB0}	60 ± 10	V
Collector-emitter voltage	V_{CEO}	60 ± 10	V
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	1.5	A
Collector current	I_C	1.0	A
Collector power dissipation	P_C	1.2	W
		5.0*	
Junction temperature	T_j	150	$^{\circ}C$
Storage temperature	T_{stg}	$-55 \sim +150$	$^{\circ}C$

*with a $100 \times 100 \times 2$ Al heat sink at $T_a=25^{\circ}C$

■ Package Dimensions



■ Inner Circuit



■ Electrical Characteristics ($T_c=25^{\circ}C$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CB0}	$V_{CB}=25V, I_E=0$			1	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V, I_C=0$			1	μA
Collector-base voltage	V_{CB0}	$I_C=100\mu A, I_E=0$	50		70	V
Collector-emitter voltage	V_{CEO}	$I_C=1mA, I_B=0$	50		70	V
Emitter-base voltage	V_{EBO}	$I_E=100\mu A, I_C=0$	5			V
DC current gain	h_{FE}^{*1}	$V_{CE}=10V, I_C=1.0A^{*2}$	4000		40000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1.0A, I_B=1.0mA^{*2}$			1.8	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1.0A, I_B=1.0mA^{*2}$			2.2	V
Transition frequency	f_T	$V_{CB}=10V, I_E=-50mA, f=200MHz$		150		MHz

*2 Pulse measurement

*1 h_{FE1} Classifications

Class	Q	R	S
h_{FE}	4000~10000	8000~20000	16000~40000

6932852 0016788 1T8

