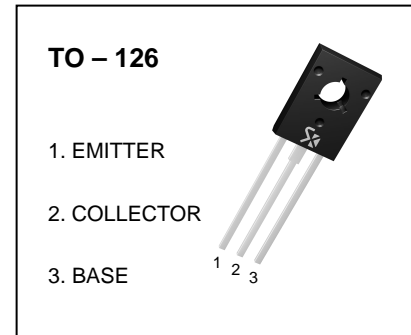


PNP Silicon Epitaxial Planar Transistor

- High Current
- Complementary to BD139



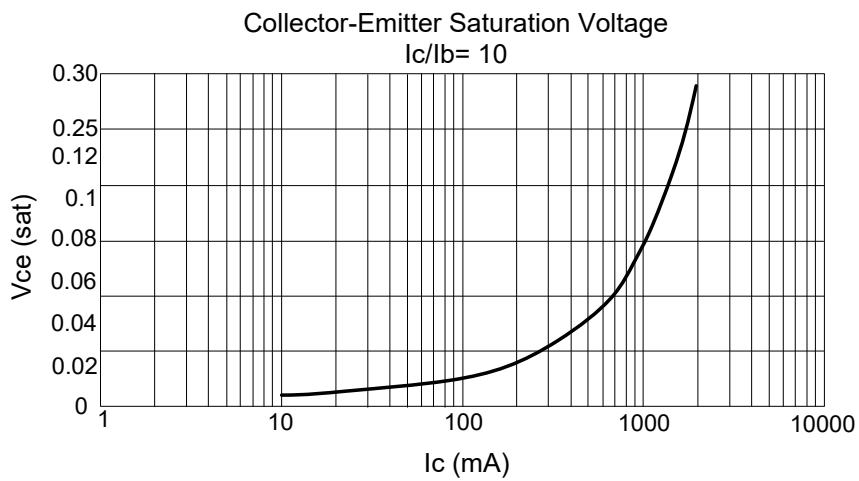
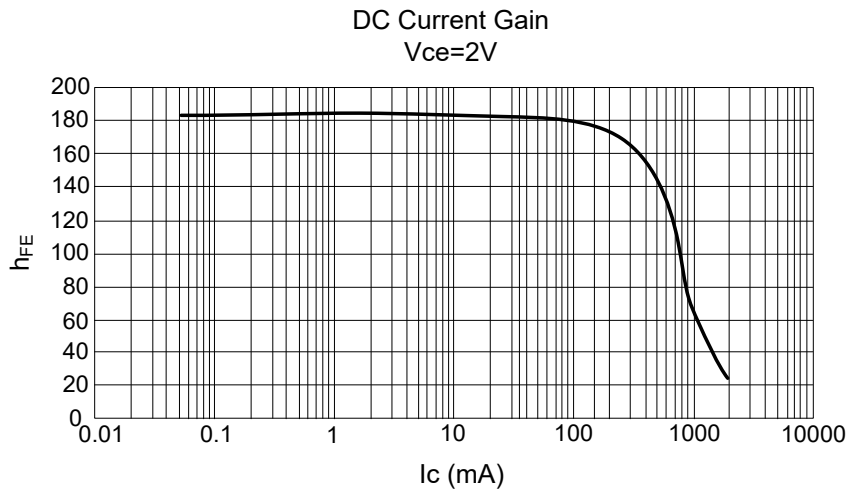
MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.5	A
P_C	Collector Power Dissipation	1.25	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

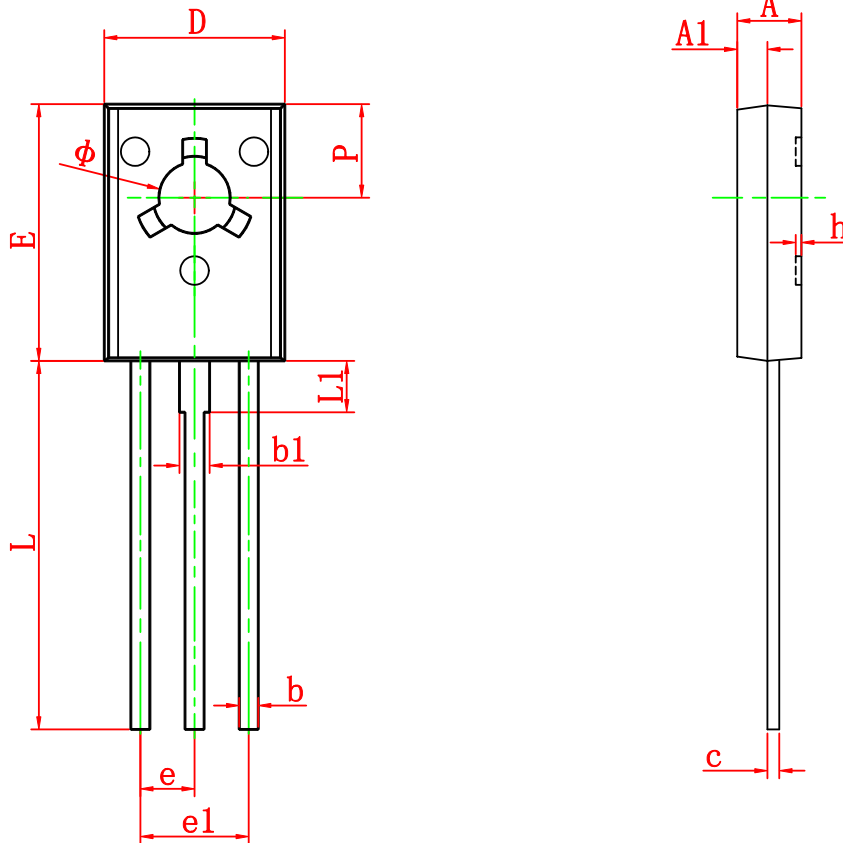
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C = -1\text{mA}, I_E = 0$	-100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CB0}	$V_{CB} = -30\text{V}, I_E = 0$			-90	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -30\text{V}, I_B = 0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-90	nA
DC current gain	h_{FE1}	$V_{CE} = -2\text{V}, I_C = -5\text{mA}$	60			
	h_{FE2}	$V_{CE} = -2\text{V}, I_C = -150\text{mA}$	40		300	
	h_{FE3}	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.45	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.04	V

TYPICAL CHARACTERISTICS



PACKAGE OUTLINE

TO-126



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.450	0.600	0.018	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
φ	3.000	3.200	0.118	0.126