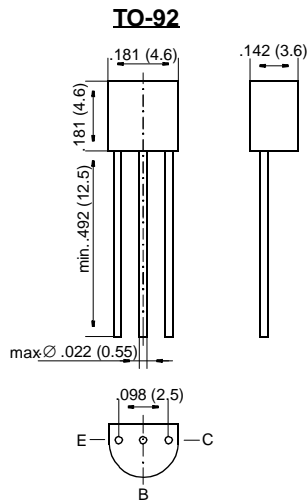


# 2N4126

## Small Signal Transistors (PNP)



Dimensions in inches and (millimeters)

### FEATURES

- ◆ PNP Silicon Epitaxial Transistor for switching and amplifier applications. Especially suitable for AF-driver and low-power output stages.
- ◆ As complementary type, the NPN transistor 2N4124 is recommended.



### MECHANICAL DATA

**Case:** TO-92 Plastic Package

**Weight:** approx. 0.18 g

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Value	Unit
Collector-Emitter Voltage	$-V_{CEO}$	25	V
Collector-Base Voltage	$-V_{CBO}$	25	V
Emitter-Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	200	mA
Peak Collector Current	$-I_{CM}$	800	mA
Base Current	$-I_B$	50	mA
Power Dissipation at $T_{amb} = 25\text{ °C}$	$P_{tot}$	625 <sup>1)</sup>	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_S$	-65 to +150	°C

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case.

# 2N4126

## ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

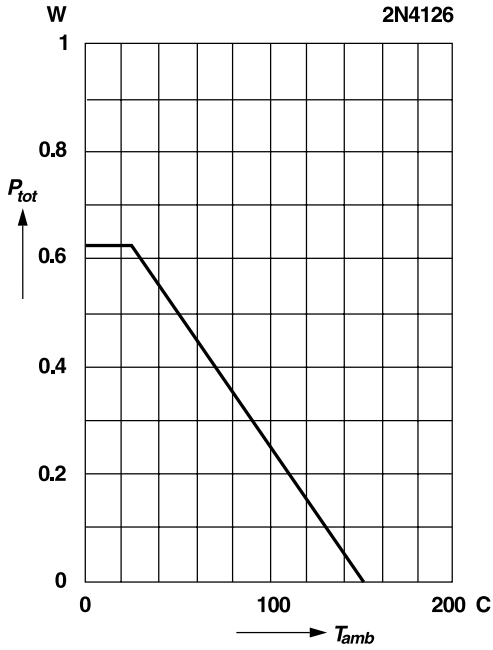
	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = -1$ V, $I_C = -2.0$ mA at $V_{CE} = -1$ V, $I_C = -50$ mA	$h_{FE}$ $h_{FE}$	120 –	– 60	360 –	– –
Collector Cutoff Current at $V_{CB} = -20$ V	$-I_{CBO}$	–	–	50	nA
Emitter Cutoff Current at $V_{EB} = -3$ V	$-I_{EBO}$	–	–	50	nA
Collector Saturation Voltage at $I_C = -50$ mA, $I_B = -5$ mA	$-V_{CESAT}$	–	–	0.4	V
Base Saturation Voltage at $I_C = -50$ mA, $I_B = -5$ mA	$-V_{BESAT}$	–	–	0.95	V
Collector-Emitter Breakdown Voltage at $I_C = -1$ mA	$-V_{(BR)CEO}$	25	–	–	V
Collector-Base Breakdown Voltage at $I_C = -10$ $\mu$ A	$-V_{(BR)CBO}$	25	–	–	V
Emitter-Base Breakdown Voltage at $I_E = -10$ $\mu$ A	$-V_{(BR)EBO}$	4	–	–	V
Gain-Bandwidth Product at $V_{CE} = -5$ V, $I_C = -10$ mA, $f = 50$ MHz	$f_T$	–	200	–	MHz
Collector-Base Capacitance at $V_{CB} = -10$ V, $f = 1$ MHz	$C_{CBO}$	–	12	–	pF
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	–	–	200 <sup>1)</sup>	K/W

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case.

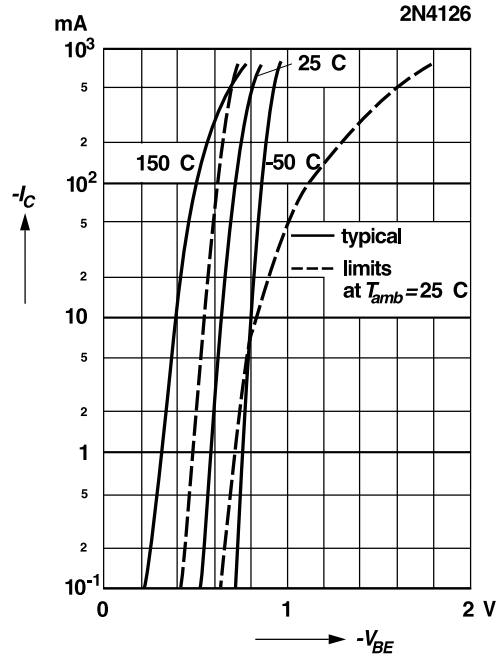
# RATINGS AND CHARACTERISTIC CURVES 2N4126

## Admissible power dissipation versus ambient temperature

Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

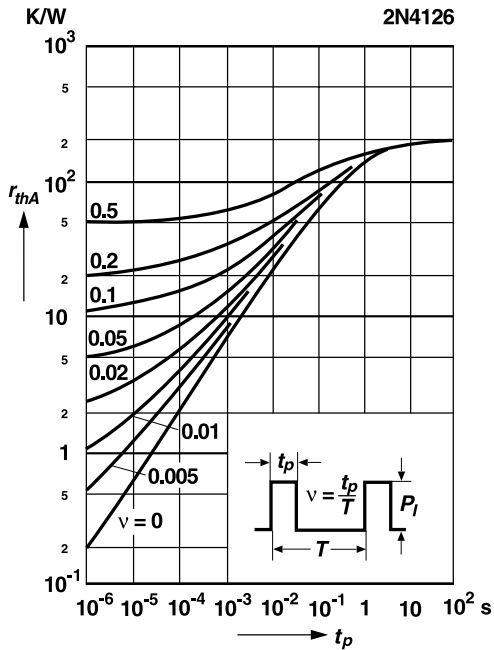


## Collector current versus base-emitter voltage

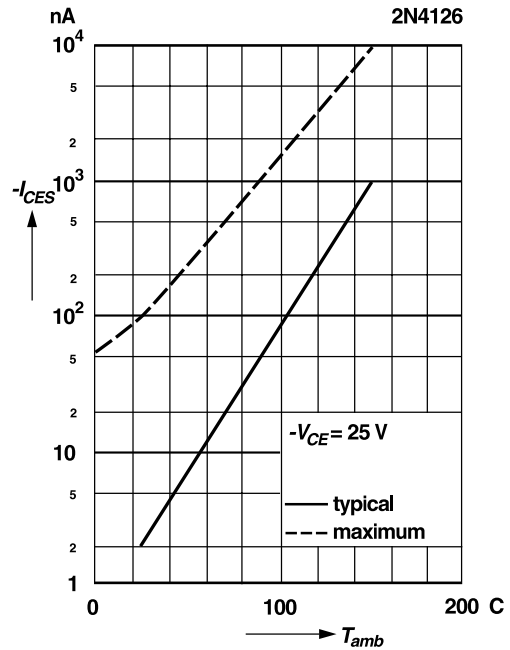


## Pulse thermal resistance versus pulse duration

Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

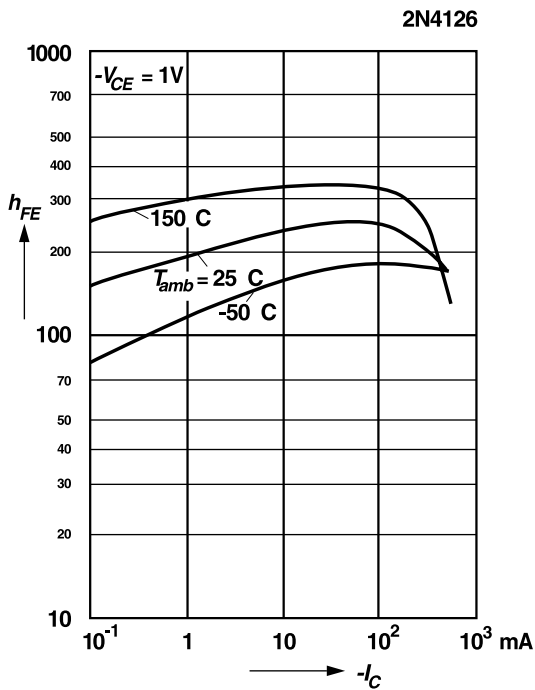


## Collector-emitter cutoff current versus ambient temperature

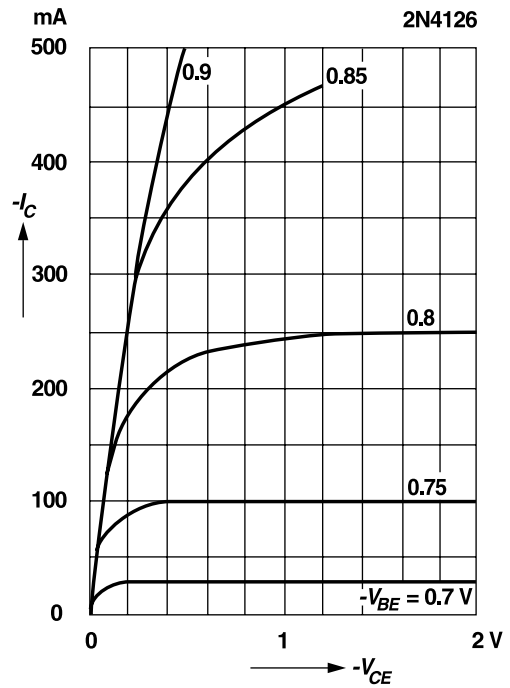


# RATINGS AND CHARACTERISTIC CURVES 2N4126

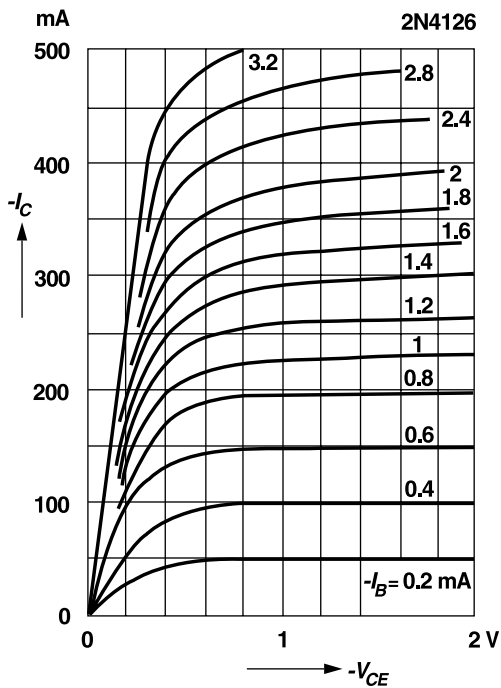
DC current gain  
versus collector current



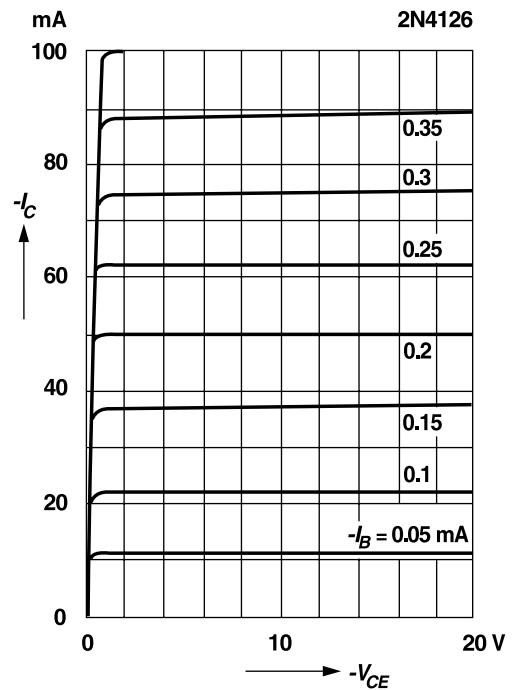
Common emitter  
collector characteristics



Common emitter  
collector characteristics

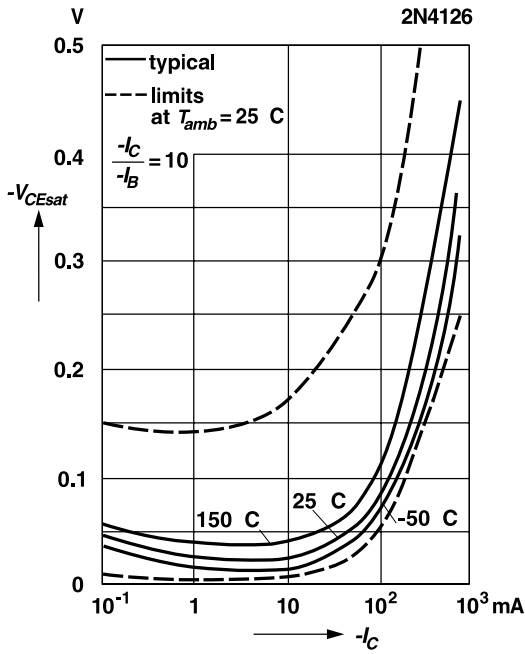


Common emitter  
collector characteristics

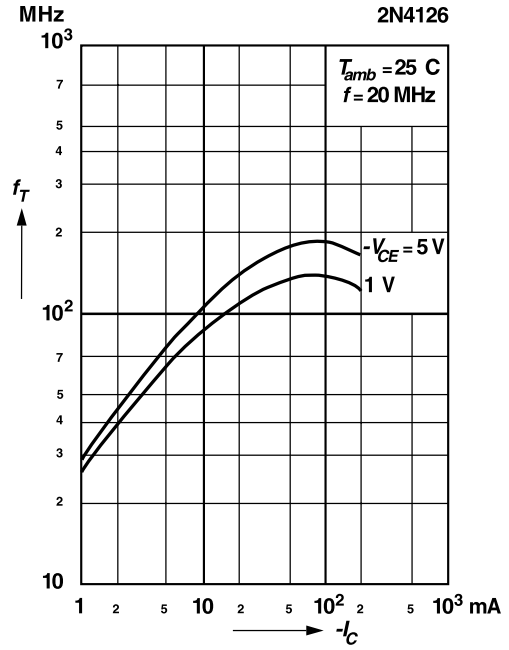


# RATINGS AND CHARACTERISTIC CURVES 2N4126

Collector saturation voltage  
versus collector current



Gain-bandwidth product  
versus collector current



Base saturation voltage  
versus collector current

