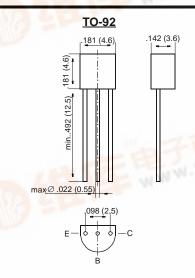
2N4126

Small Signal Transistors (PNP)



Dimensions in inches and (millimeters)

FEATURES

PNP Silicon Epitaxial Transistor for switching and amplifier applications. Especially suit-able 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 °C	P _{tot}	625 ¹⁾	mW	
Junction Temperature	Tj	150 N.D.	°C	
Storage Temperature Range	T _S	-65 to +150	°C	

¹⁾ 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.	Тур.	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}	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 μA	-V _{(BR)CBO}	25	_	_	V
Emitter-Base Breakdown Voltage at I _E = –10 μA	-V _{(BR)EBO}	4	_	_	V
Gain-Bandwidth Product at $V_{CE} = -5 \text{ V}$, $I_{C} = -10 \text{ mA}$, $f = 50 \text{ MHz}$	f _T	-	200	_	MHz
Collector-Base Capacitance at V _{CB} = -10 V, f = 1 MHz	ССВО	_	12	_	pF
Thermal Resistance Junction to Ambient Air	R _{thJA}	_	_	2001)	K/W

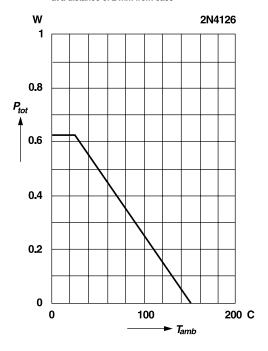
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case.



RATINGS AND CHARACTERISTIC CURVES 2N4126

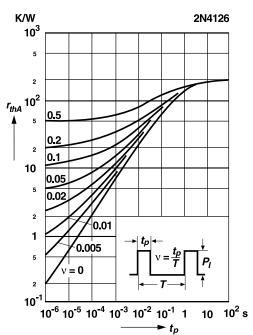
Admissible power dissipation versus ambient temperature

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

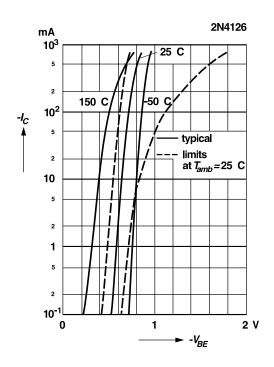


Pulse thermal resistance versus pulse duration

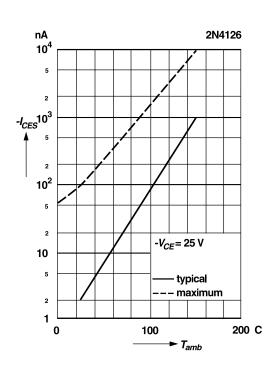
Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case



Collector current versus base-emitter voltage



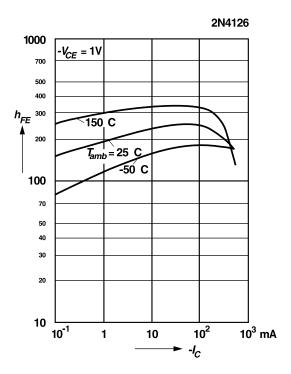
Collector-emitter cutoff current versus ambient temperature



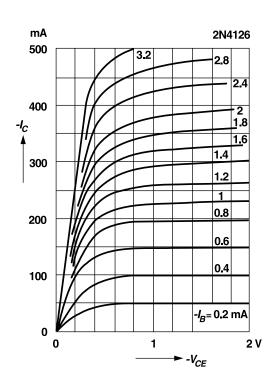


RATINGS AND CHARACTERISTIC CURVES 2N4126

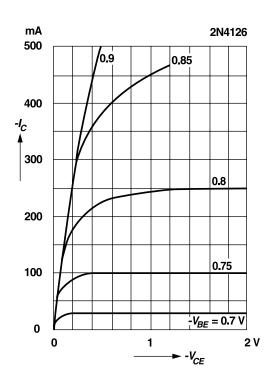
DC current gain versus collector current



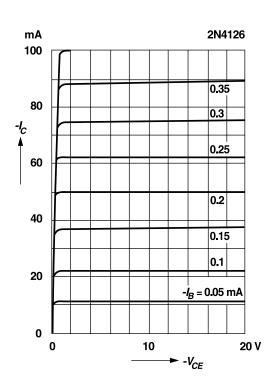
Common emitter collector characteristics



Common emitter collector characteristics



Common emitter collector characteristics



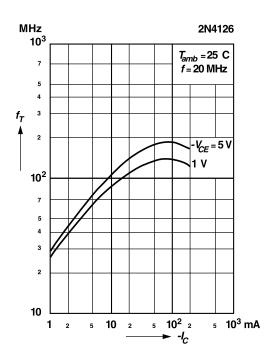


RATINGS AND CHARACTERISTIC CURVES 2N4126

Collector saturation voltage versus collector current

2N4126 0.5 typical -limits at *T_{amb}* = 25 C 0.4 -V_{CEsat} 0.3 0.2 0.1 -50 C 150 C 10² 10³ mA 10 -l_C

Gain-bandwidth product versus collector current



Base saturation voltage versus collector current

