2N4126

Small Signal Transistors (PNP)



- 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

<u>TO-92</u>

.<u>181 (4.6</u>)

,098 (2,5)

Dimensions in inches and (millimeters)

181 (4.6)

492 (12.5)

min.

max<u>Ø .022 (0.55)</u>

F

.142 (3.6)

Symbol	Value	Unit
-V _{CEO}	25	V
-V _{CBO}	25	V
-V _{EBO}	4	V
-I _C	200	mA
-I _{CM}	800	mA
-I _B	50	mA
P _{tot}	625 ¹⁾	mW
Tj	150	°C
T _S	-65 to +150	°C
-	$ \begin{array}{c c} -V_{CEO} \\ -V_{CBO} \\ \hline -V_{CBO} \\ \hline -V_{CBO} \\ \hline -I_C \\ \hline -I_C \\ -I_C \\ \hline P_{tot} \\ \hline T_j \\ \hline \end{array} $	$-V_{CEO}$ 25 $-V_{CBO}$ 25 $-V_{CBO}$ 4 $-V_{EBO}$ 4 $-I_C$ 200 $-I_C$ 800 $-I_B$ 50 P _{tot} 625 ¹) T _j 150



2N4126

ELECTRICAL CHARACTERISTICS

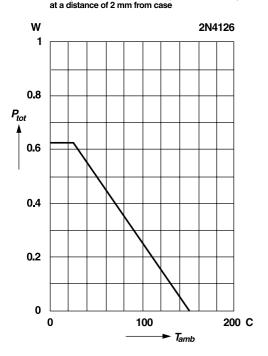
Ratings at 25 °C ambient temperature unless otherwise specified

h _{FE} -I _{CBO} -I _{EBO} -V _{CESAT}	120 	- 60 - -	360 50 50 0.4	nA NA V
-I _{EBO} -V _{CESAT}	-	-	50 0.4	nA V
-V _{CESAT}	-	-	0.4	V
	-	-		
-V _{BESAT}	_	_	0.05	
			0.95	V
-V _{(BR)CEO}	25	-	-	V
-V _{(BR)CBO}	25	-	-	V
-V _{(BR)EBO}	4	-	-	V
f _T	_	200	_	MHz
C _{CBO}	_	12	-	pF
R _{thJA}	_	-	2001)	K/W
	-V _{(BR)CBO} -V _{(BR)EBO} f _T C _{CBO} R _{thJA}	-V _{(BR)CBO} 25 -V _{(BR)EBO} 4 f _T – C _{CBO} – R _{thJA} –	-V _{(BR)CBO} 25 – -V _{(BR)EBO} 4 – f _T – 200 C _{CBO} – 12 R _{thJA} – –	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

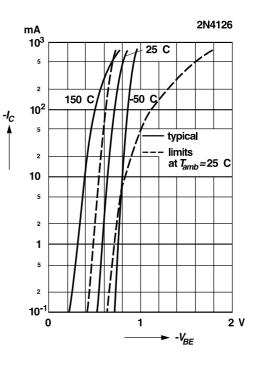


RATINGS AND CHARACTERISTIC CURVES 2N4126

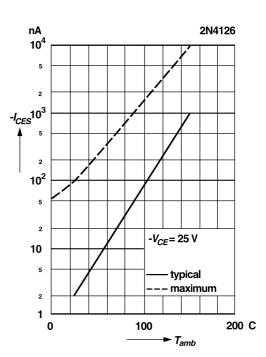
Admissible power dissipation versus ambient temperature Valid provided that leads are kept at ambient temperature

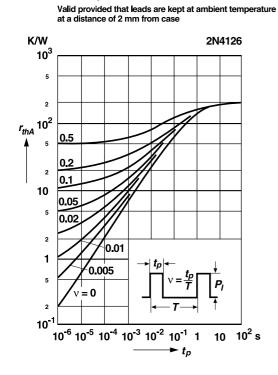


Collector current versus base-emitter voltage



Collector-emitter cutoff current versus ambient temperature



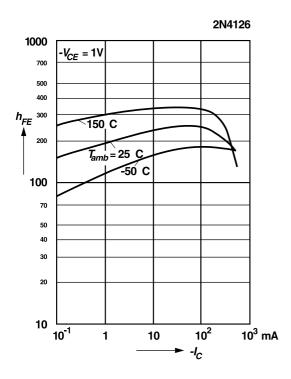


Pulse thermal resistance versus pulse duration

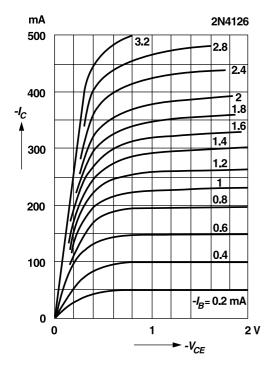
GENERAL SEMICONDUCTOR®

RATINGS AND CHARACTERISTIC CURVES 2N4126

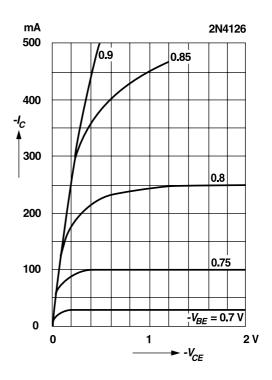
DC current gain versus collector current



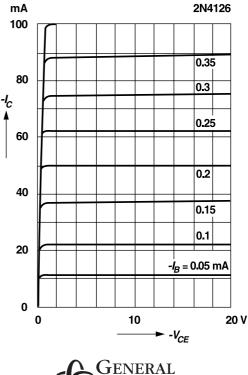
Common emitter collector characteristics



Common emitter collector characteristics



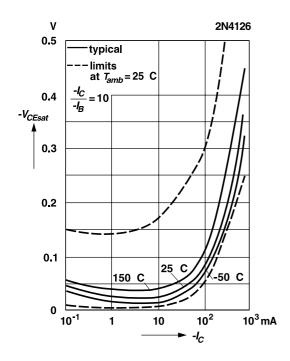
Common emitter collector characteristics



Semiconductor[®]

RATINGS AND CHARACTERISTIC CURVES 2N4126

Collector saturation voltage versus collector current



MHz 2N4126 10³ *T_{amb}* = 25 C 7 f = 20 MHz5 4 3 f_T 2 -*V_{CE}* = 5 V 1 V 10² 7 5 4 3 2

10 2

5

5 10² 2

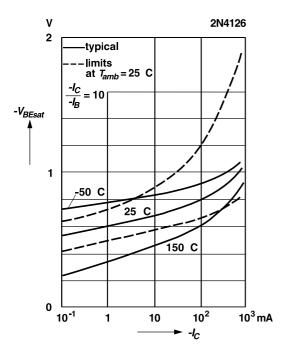
-I_c

₅ 10³ mA

10

1 2

Base saturation voltage versus collector current





Gain-bandwidth product versus collector current