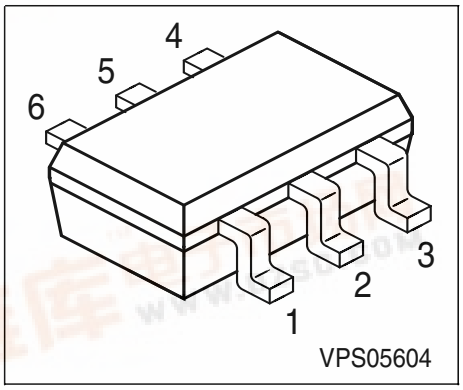
查询BCM856S供应商 捷多邦，专业PCB打样工厂，24小时加急出货

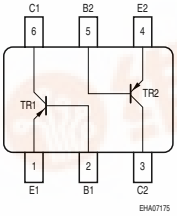
Infineon technologies

BCM856S

PNP Silicon AF Transistor Array



- Precision matched transistor pair: $\Delta I_C \leq 10\%$
- For current mirror applications
- Low collector-emitter saturation voltage
- Two (galvanic) internal isolated Transistors
- Complementary type: BCM846S



Type	Marking	Pin Configuration						Package
BCM856S	3Ms	1=E1	2=B1	3=C2	4=E2	5=B2	6=C1	SOT363

Maximum Ratings

Parameter	Symbol	Value	Unit
Collector-emitter voltage	V_{CEO}	65	V
Collector-emitter voltage	V_{CES}	80	
Collector-base voltage	V_{CBO}	80	
Emitter-base voltage	V_{EBO}	5	
Collector current	I_C	100	mA
Peak collector current	I_{CM}	200	
Total power dissipation- T_S = 115 °C	P_{tot}	250	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-65 ... 150	

Thermal Resistance

Parameter	Symbol	Value	Unit
Junction - soldering point[1)]	R_{thJS}	140	K/W

[1]For calculation of R_{thJA} please refer to Application Note Thermal Resistance

找PDF 维库一下 pdf.dzsc.com

Electrical Characteristics at T_A = 25°C, unless otherwise specified

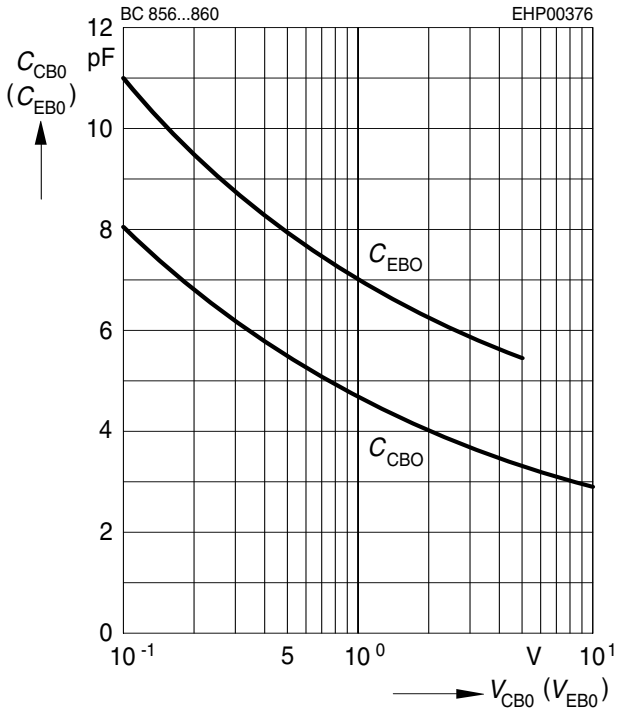
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC Characteristics					
Collector-emitter breakdown voltage I_C = 10 mA, I_B = 0 A	$V_{(BR)CEO}$	65	-	-	V
Collector-base breakdown voltage I_C = 10 µA, I_E = 0 A	$V_{(BR)CBO}$	80	-	-	
Collector-emitter breakdown voltage I_C = 10 µA, V_{BE} = 0 A	$V_{(BR)CES}$	80	-	-	
Emitter-base breakdown voltage I_E = 10 µA, I_C = 0 A	$V_{(BR)EBO}$	5	-	-	
Collector-base cutoff current	I_{CBO}				nA
V_{CB} = 30 V, I_E = 0 A		-	-	15	
V_{CB} = 30 V, I_E = 0 A, T_A = 150 °C		-	-	5	
DC current gain-[1]	h_{FE}				-
I_C = 10 µA, V_{CE} = 5 V		-	250	-	
I_C = 2 mA, V_{CE} = 5 V		200	290	450	
Collector-emitter saturation voltage[1]	V_{CEsat}				mV
I_C = 10 mA, I_B = 0.5 mA		-	90	300	
I_C = 100 mA, I_B = 5 mA		-	250	650	
Base emitter saturation voltage[1]	V_{BEsat}				
I_C = 10 mA, I_B = 0.5 mA		-	700	-	mV
I_C = 100 mA, I_B = 5 mA		-	850	-	mV
Base-emitter voltage-[1]	$V_{BE(ON)}$				
I_C = 2 mA, V_{CE} = 5 V		600	650	750	
I_C = 10 mA, V_{CE} = 5 V		-	-	820	
Matching	ΔI_C				%
I_B = 1 µA, V_{CE1} = V_{CE2} = 1.0V		-10	-	10	
I_B = 100 µA, V_{CE1} = V_{CE2} = 1.0V		-10	-	10	

[1]Puls test: t < 300µs; D < 2%

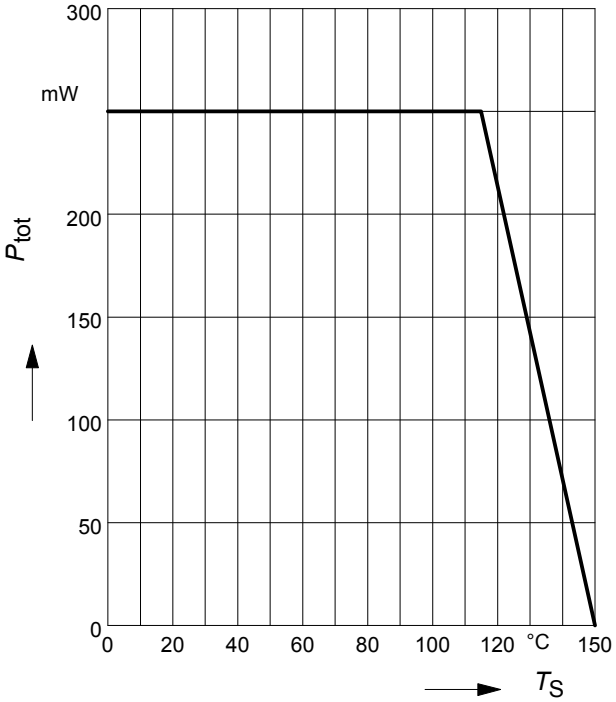
Electrical Characteristics at T_A = 25°C, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
AC Characteristics					
Transition frequency I_C = 20 mA, V_{CE} = 5 V, f = 100 MHz	f_T	-	250	-	MHz
Collector-base capacitance V_{CB} = 10 V, f = 1 MHz	C_{cb}	-	3	-	pF
Emitter-base capacitance V_{EB} = 0.5 V, f = 1 MHz	C_{eb}	-	8	-	
Short-circuit input impedance I_C = 2 mA, V_{CE} = 5 V, f = 1 kHz	h_{11e}	-	4.5	-	kΩ
Open-circuit reverse voltage transf. ratio I_C = 2 mA, V_{CE} = 5 V, f = 1 kHz	h_{12e}	-	2	-	10^{-4}
Short-circuit forward current transf. ratio I_C = 2 mA, V_{CE} = 5 V, f = 1 kHz	h_{21e}	-	330	-	-
Open-circuit output admittance I_C = 2 mA, V_{CE} = 5 V, f = 1 kHz	h_{22e}	-	30	-	µS
Noise figure I_C = 200 µA, V_{CE} = 5 V, f = 1 kHz, Δ f = 200 Hz, R_S = 2 kΩ	F	-	-	10	dB

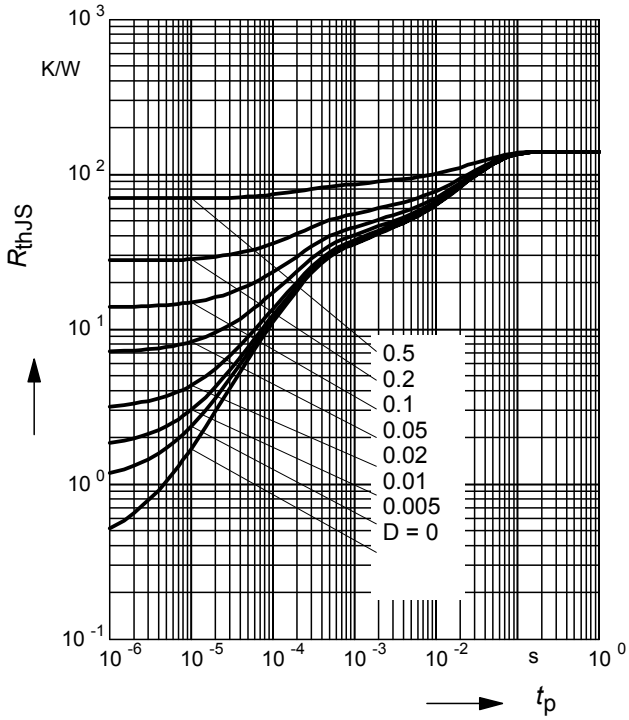
Collector-base capacitance $C_{CB} = f(V_{CB0})$
Emitter-base capacitance $C_{EB} = f(V_{EB0})$



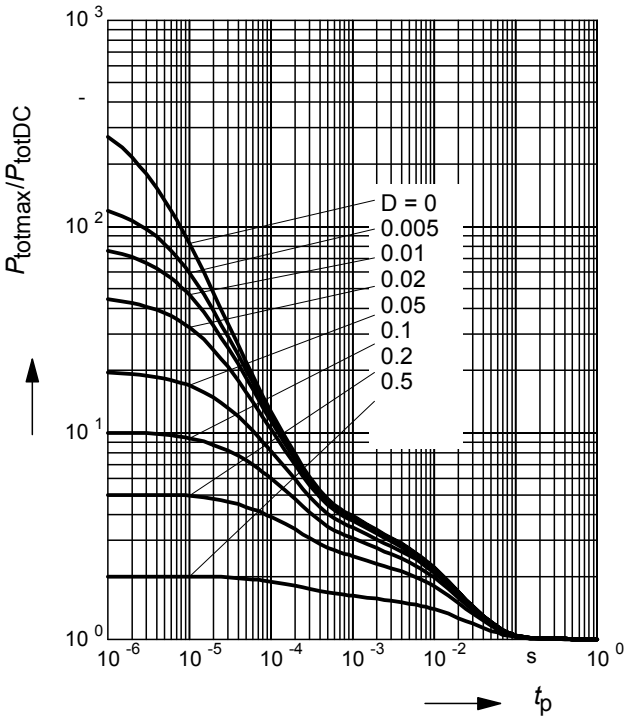
Total power dissipation $P_{tot} = f(T_S)$



Permissible Pulse Load $R_{thJS} = f(t_p)$

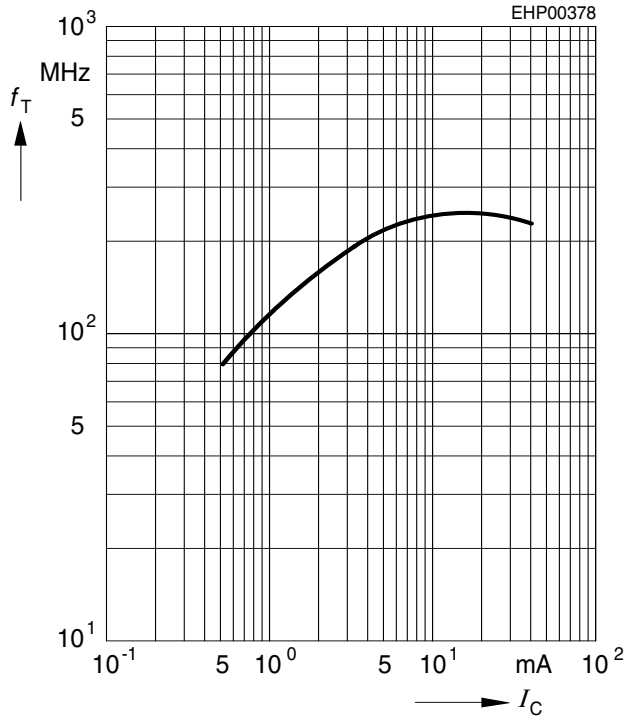


Permissible Pulse Load
$P_{totmax}/P_{totDC} = f(t_p)$



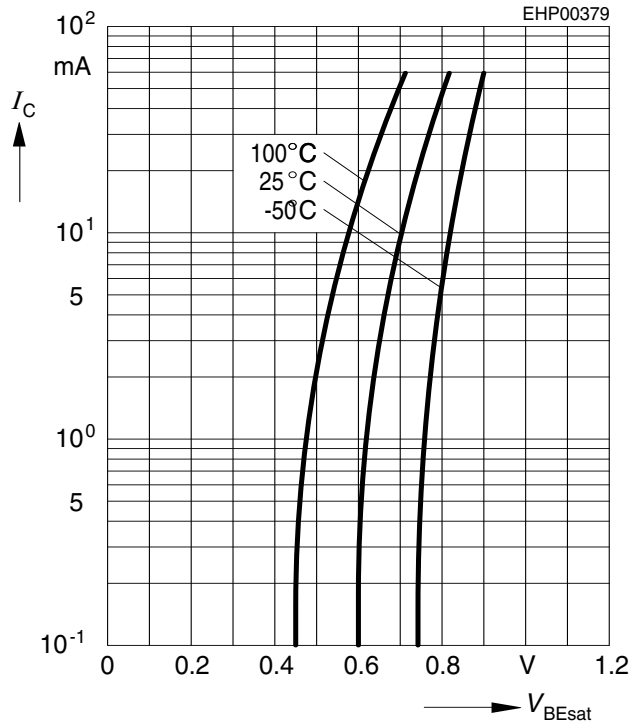
Transition frequency $f_T = f(I_C)$

V_{CE} = 5 V



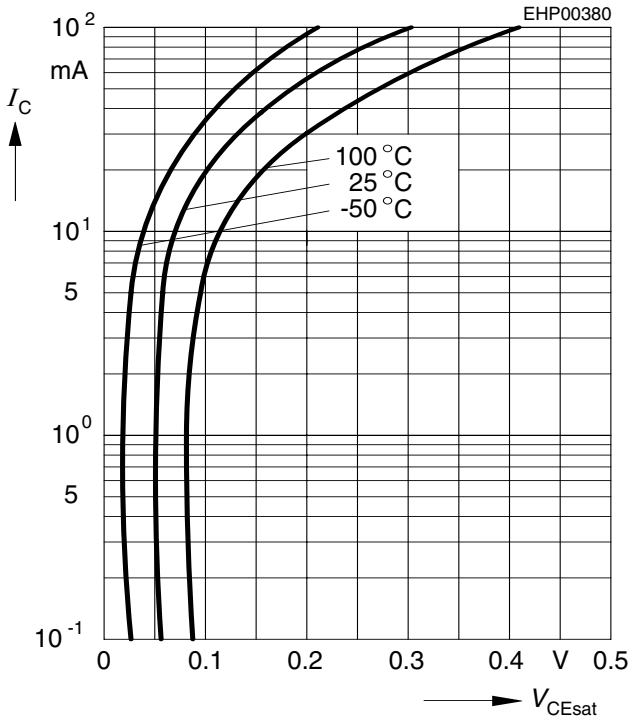
Base-emitter saturation voltage

$I_C = f(V_{BEsat})$, h_{FE} = 20



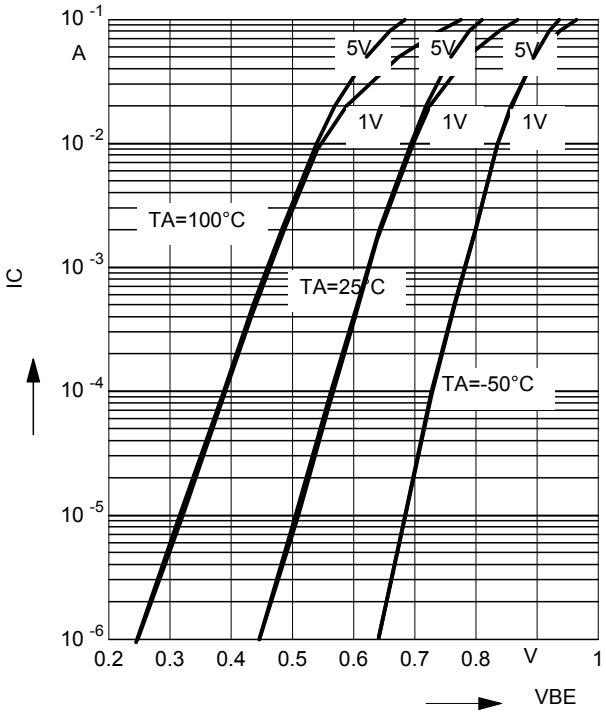
Collector-emitter saturation voltage

$I_C = f(V_{CEsat})$, h_{FE} = 20

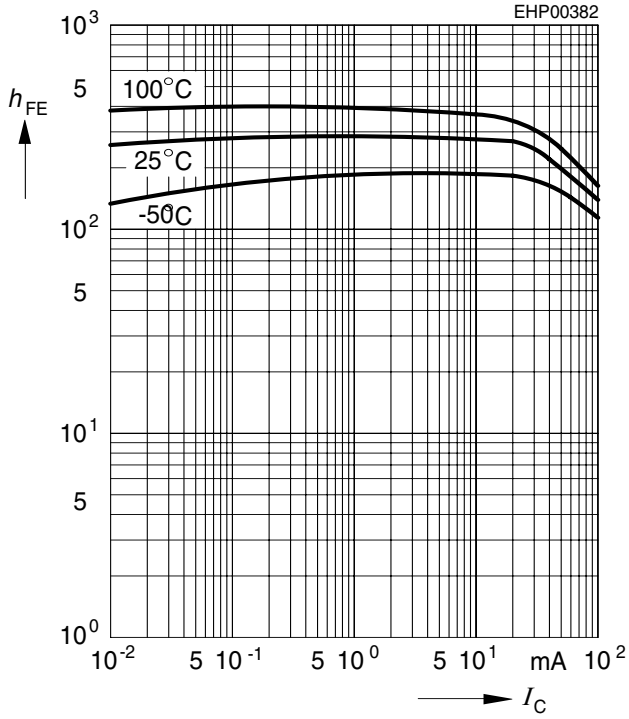


Collector current $I_C = f(V_{BE})$

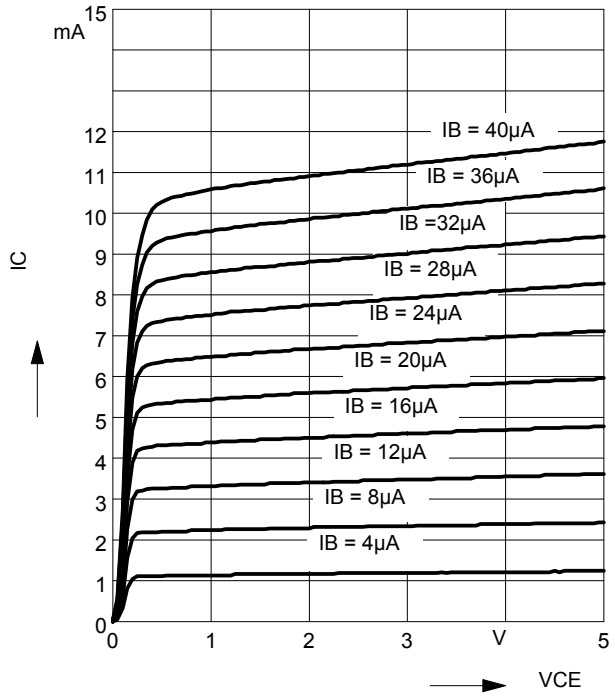
V_{CE} = Parameter



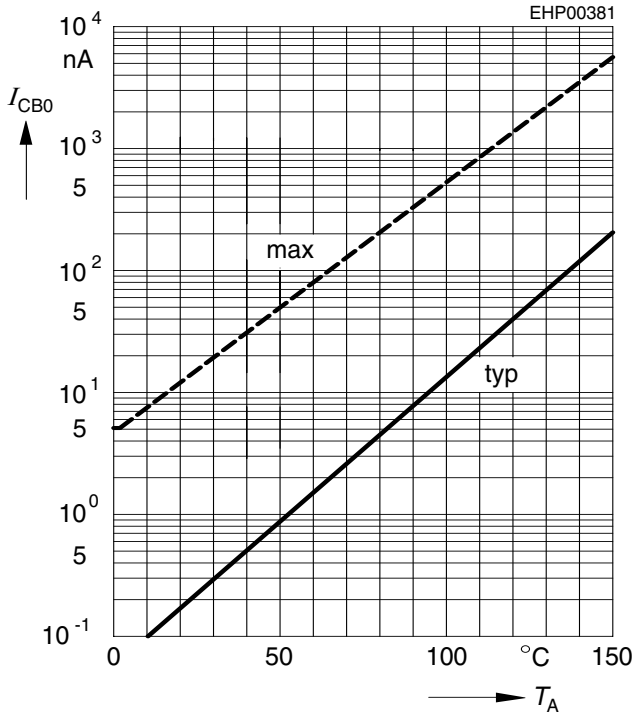
DC current gain $h_{FE} = f(I_C)$
$V_{CE} = 5V$



Output characteristics $I_C = f(V_{CE})$,
I_B = parameter

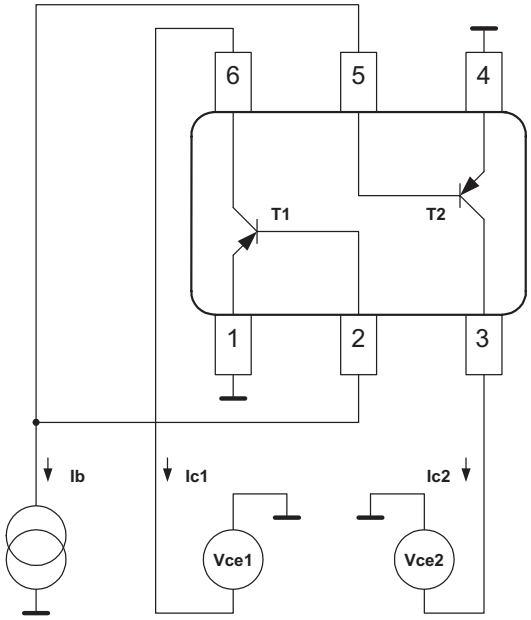


Collector cutoff current $I_{CBO} = f(T_A)$
V_{CBO} = 30 V



Definition of matching

$\Delta I_C = (I_{C2}-I_{C1})/I_{C1}$



Published by Infineon Technologies AG,
St.-Martin-Strasse 53,
81669 München

© Infineon Technologies AG 2004.
All Rights Reserved.

Attention please!

The information herein is given to describe certain components and shall not be considered as a guarantee of characteristics.

Terms of delivery and rights to technical change reserved.

We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office (www.Infineon.com).

Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.