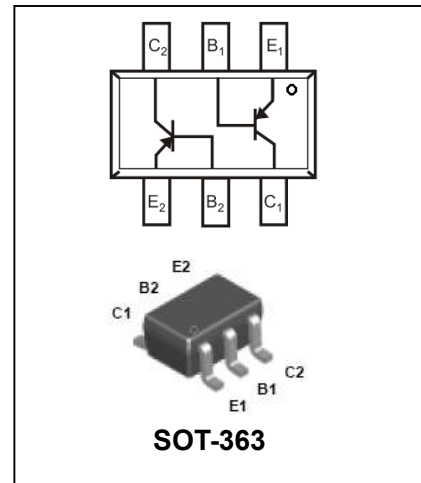


PNP general purpose Transistor

FEATURES

- For AF input stages and driver applications
- High current gain
- Low collector-emitter saturation voltage
- Non-Halogen
- Two (galvanic) internal isolated Transistors with good matching in one package



APPLICATIONS

- General purpose switching and amplification.

ORDERING INFORMATION

Type No.	Marking	Package Code
BC856S	3D	SOT-363

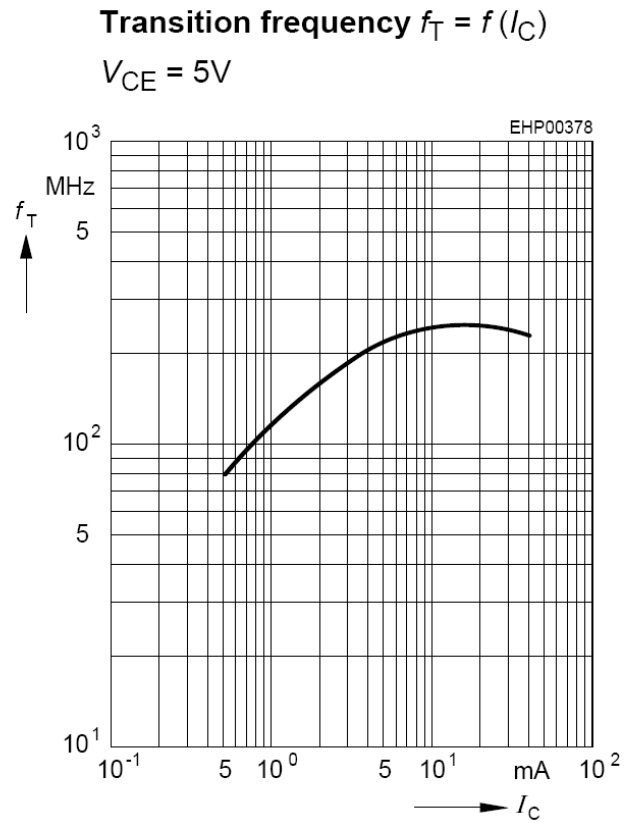
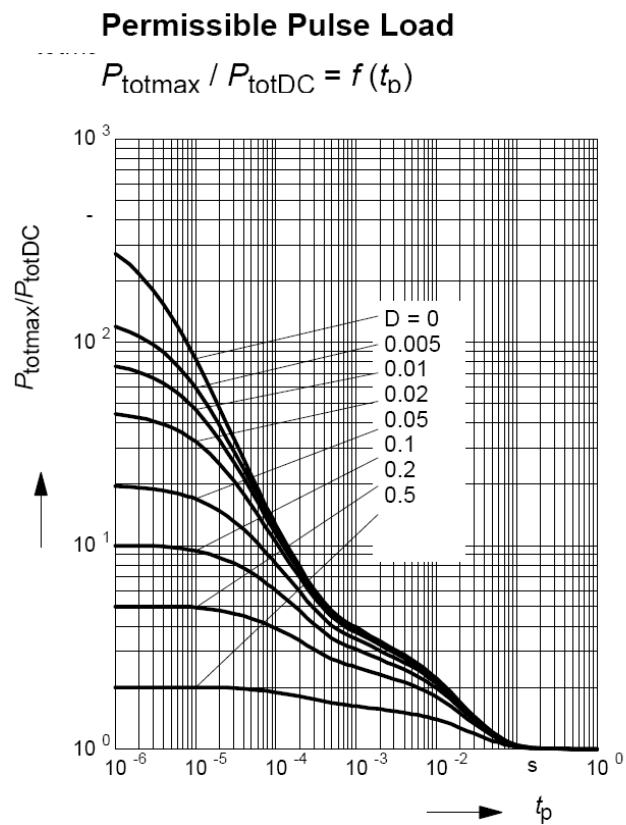
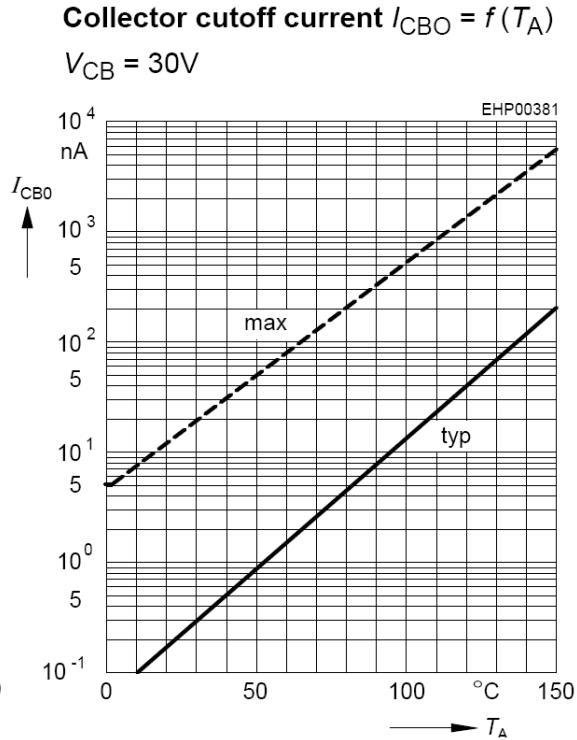
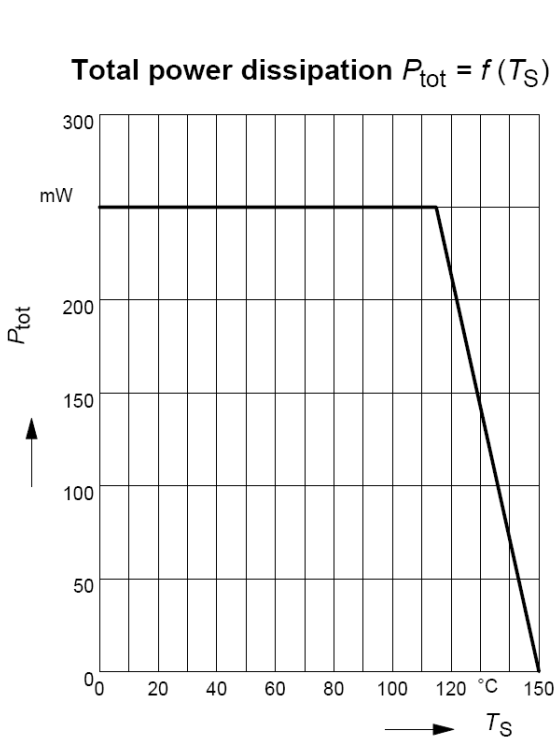
MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-65	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-100	mA
P_C	Collector Dissipation	250	mW
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C

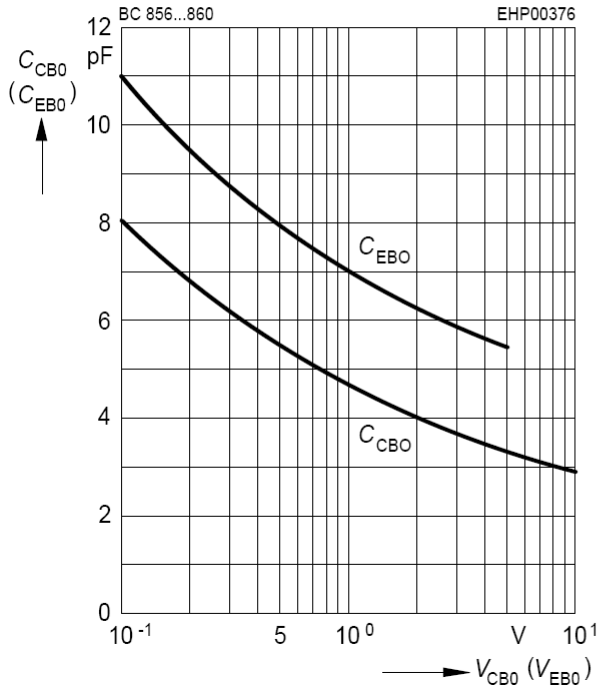
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-65			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30V, I_E=0$			-15	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-5V, I_C=-10\mu A$ $V_{CE}=-5V, I_C=-2mA$	200	250 290	475	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-10mA, I_B=-0.5mA$ $I_C=-100mA, I_B=-5mA$			-0.3 -0.65	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-10mA, I_B=-0.5mA$ $I_C=-100mA, I_B=-5mA$		-0.7 -0.85		V
Base-emitter voltage	$V_{BE(on)}$	$I_C=-2mA, V_{CE}=-5V$ $I_C=-10mA, V_{CE}=-5V$	-0.6	-0.65	-0.75 -0.82	V
collector capacitance	C_c	$V_{CB}=-10V, f=1MHz$		3		pF
Transition frequency	F	$I_C=-200\mu A, V_{CE}=-5V,$ $R_S=2k\Omega, f=1kHz,$ $B=200Hz$			10	dB
Transition frequency	f_T	$V_{CE}=-5V, I_C=-20mA$ $f=100MHz$		250		MHz

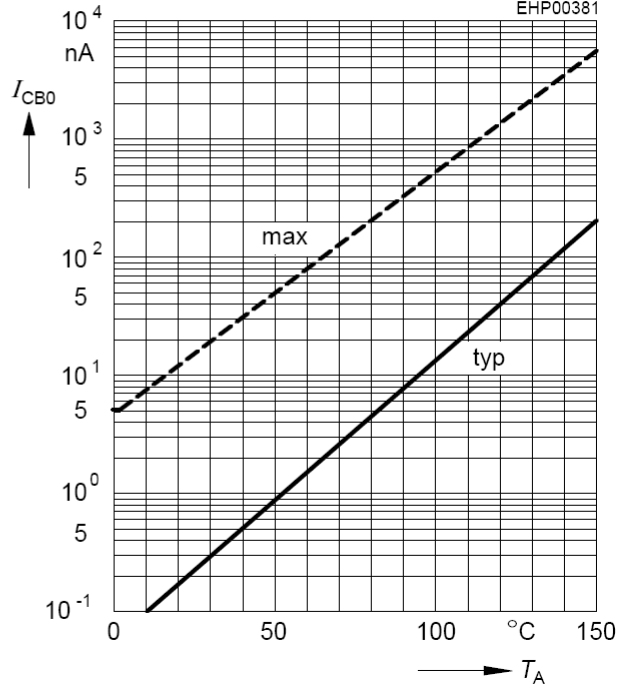
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



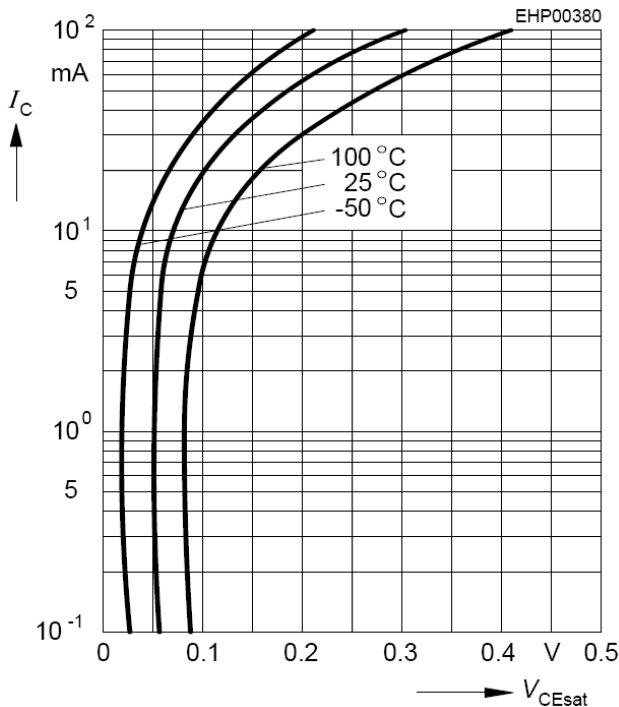
Collector-base capacitance $C_{CB} = f(V_{CBC})$
Emitter-base capacitance $C_{EB} = f(V_{EBO})$



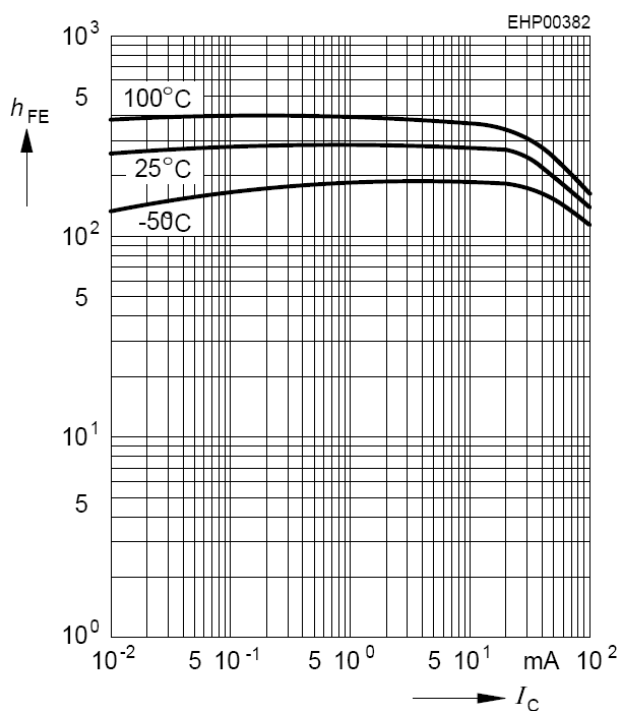
Collector cutoff current $I_{CBO} = f(T_A)$
 $V_{CB} = 30V$



Collector-emitter saturation voltage
 $I_C = f(V_{CEsat}), h_{FE} = 20$

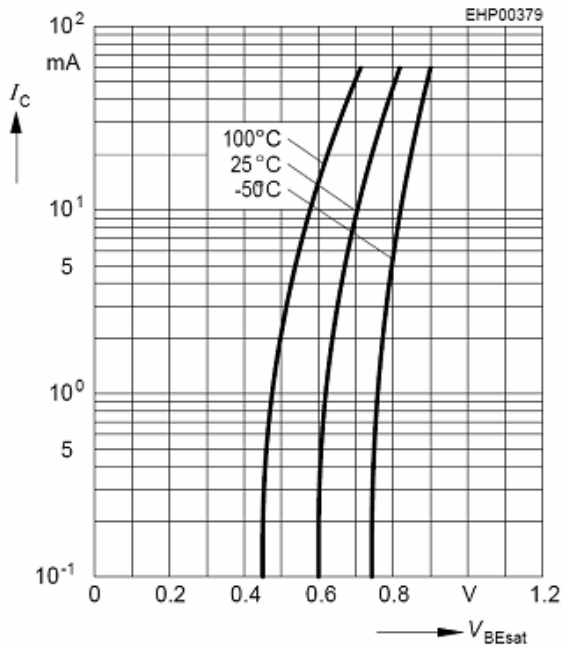


DC current gain $h_{FE} = f(I_C)$
 $V_{CE} = 5V$

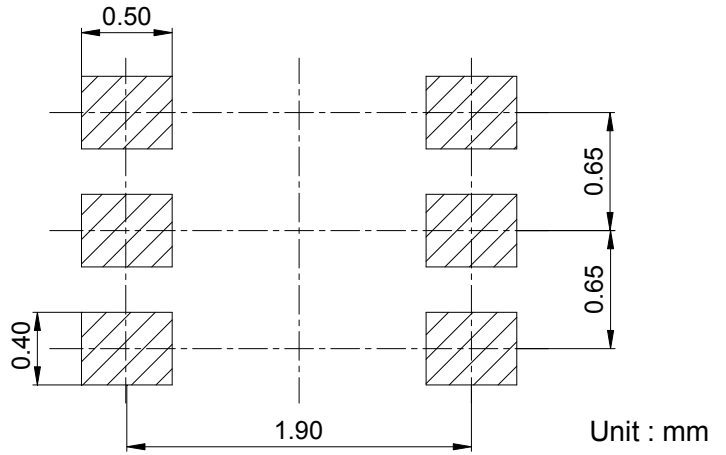


Base-emitter saturation voltage

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



SOLDERING FOOTPRINT



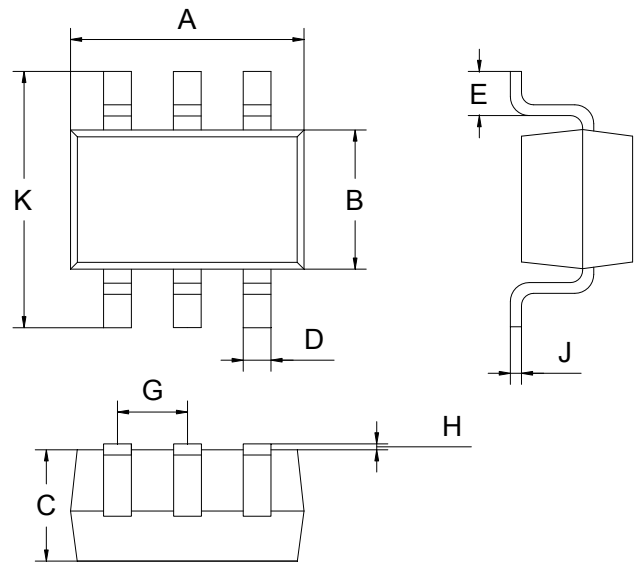
PACKAGE INFORMATION

Device	Package	Shipping
BC856S	SOT-363	3000/Tape&Reel

PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40
All Dimensions in mm		