

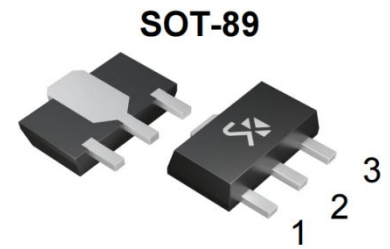


2SB766

PNP Silicon Epitaxial Planar Transistor

Features

- Large collector power dissipation P_C
- Complementary to 2SD874



Maximum Ratings($T_A=25^{\circ}\text{C}$, unless otherwise noted.)

1base 2collector 3emitter

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current Continuous	I_C	-1	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature and Storage Temperature	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics($T_A=25^{\circ}\text{C}$, unless otherwise noted.)

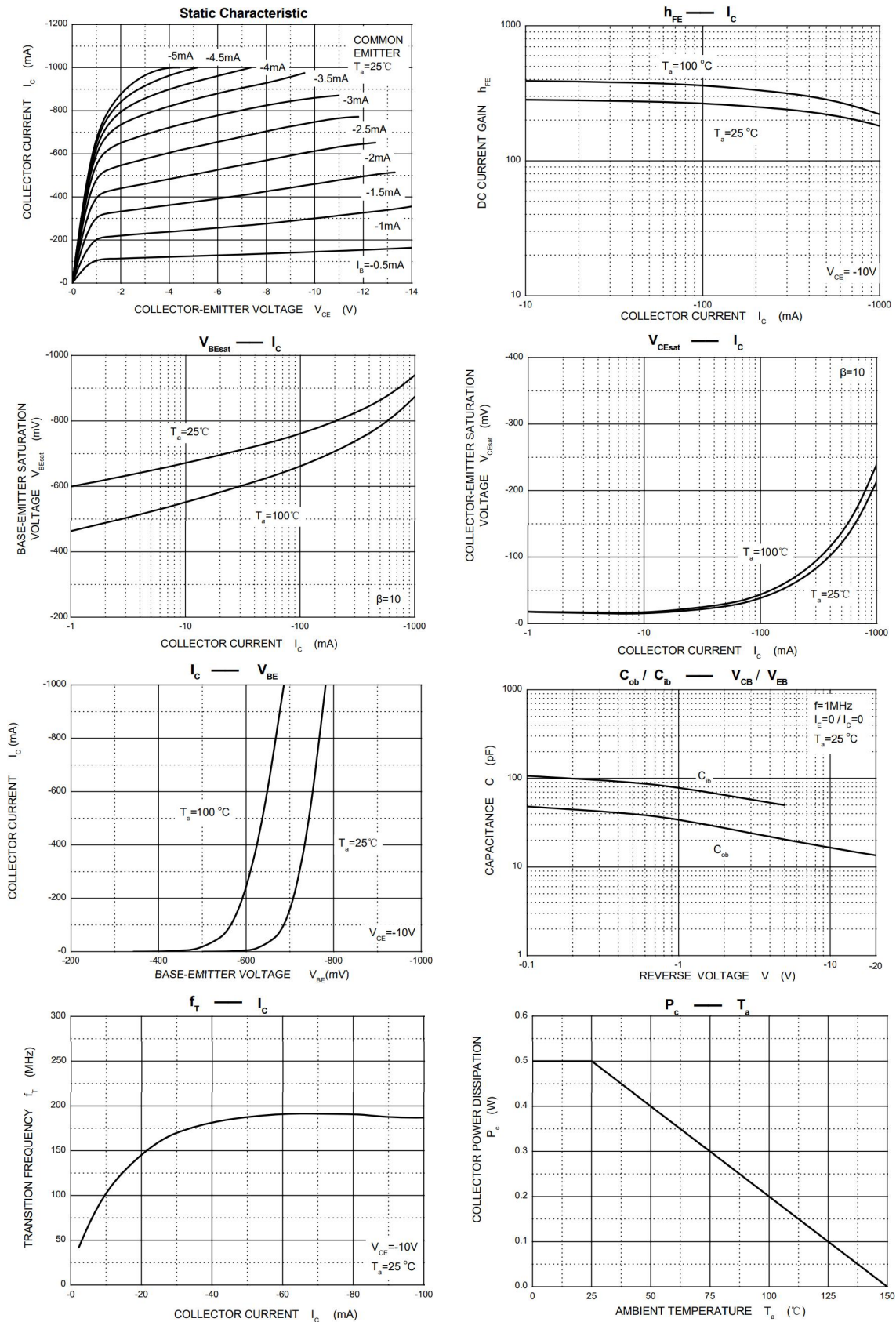
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-2\text{mA}, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-10\text{V}, I_C=-500\text{mA}$	85		340	
		$V_{CE}=-5\text{V}, I_C=-1\text{A}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=200\text{MHz}$		200		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0\text{mA}, f=1\text{MHz}$		20	30	pF

Classification Of h_{FE}

Rank	Q	R	S
Range	85-170	120-240	170-340
Marking	AQ	AR	AS



Typical Characteristics

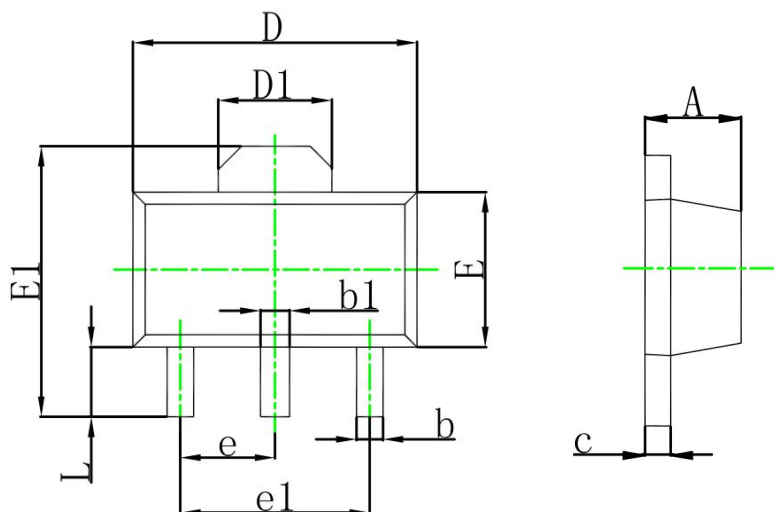




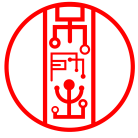
Package Information

SOT-89

Dimensions in mm



Symbol	Dimensions in millimeters		Dimensions in inches	
	Min	Max	Min	Max
A	1.350	1.650	0.053	0.065
b	0.300	0.550	0.012	0.022
b1	0.400	0.600	0.016	0.024
c	0.350	0.450	0.014	0.018
D	4.350	4.650	0.171	0.183
D1	1.700 REF.		0.067 REF	
E	2.300	2.600	0.091	0.102
E1	3.950	4.300	0.156	0.169
e	1.500 TYP		0.060 TYP	
e1	3.000 TYP		0.118 TYP	
L	0.900	1.200	0.035	0.047



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