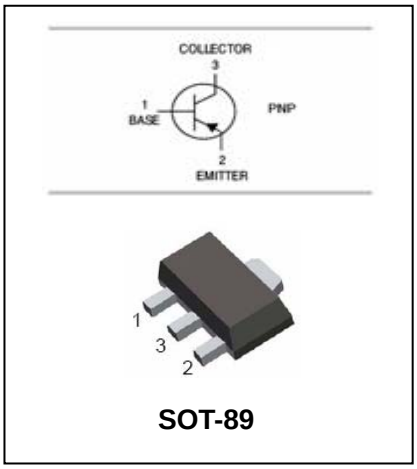
Silicon PNP epitaxial planer transistor 2SB766

FEATURES

- Large collector power dissipation P_C.
- Mini Power type package,allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

Lead-free



SOT-89

ORDERING INFORMATION

Type No.	Marking	Package Code
2SB766	AQ/AR/AS	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Unit**
V_{CBO}	Collector-Base voltage	-30	V
V_{CEO}	Collector-Emitter voltage	-25	V
V_{EBO}	Emitter-Base voltage	-5	V
I_C	Collector current	-1	A
I_{CP}	Peak collector current	-1.5	A
P_C	Collector power dissipation	1	W
T_j,T_{stg}	Junction and storage temperature	-55 to+150	℃

Silicon PNP epitaxial planer transistor 2SB766

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

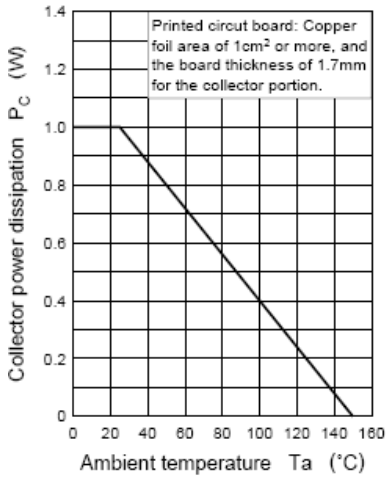
Parameter	Symbol	Test conditions	MIN		MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-10μA I_E=0	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-2mA I_B=0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V I_E=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-10V I_C=-500mA	85		340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA I_B=-50mA		-0.2	-0.4	V
Base- emitter saturation voltage	$V_{BE(sat)}$	I_C=-500mA I_B=-50mA		-0.85	-1.2	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-50mA, f=200MHz		200		MHz
Collector Output Capacitance	C_{obo}	V_{CB}=-10V f=1.0MHz I_E=0	-	20	30	pF

CLASSIFICATION H_{FE}

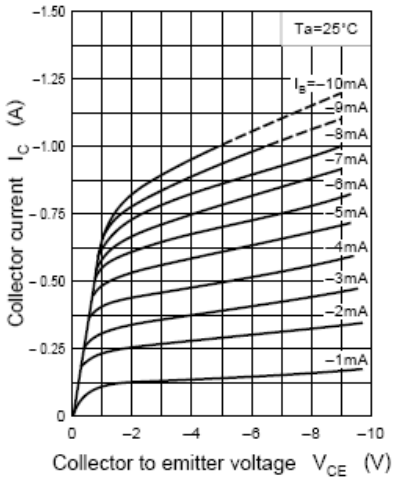
Rank	Q	R	S
Range	85-170	120-240	170-340
Marking	AQ	AR	AS

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

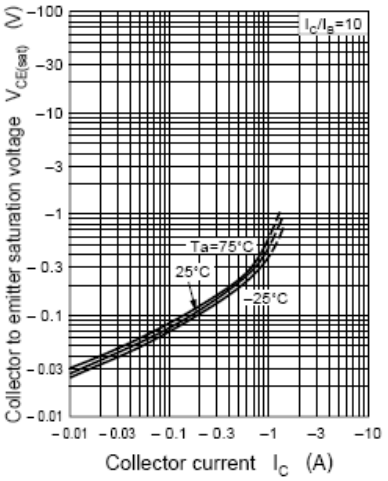
P_C — Ta



I_C — V_{CE}

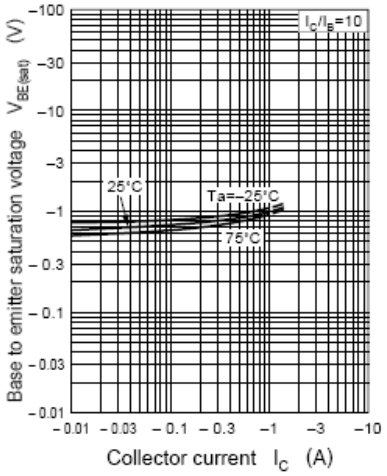


$V_{CE(sat)}$ — I_C

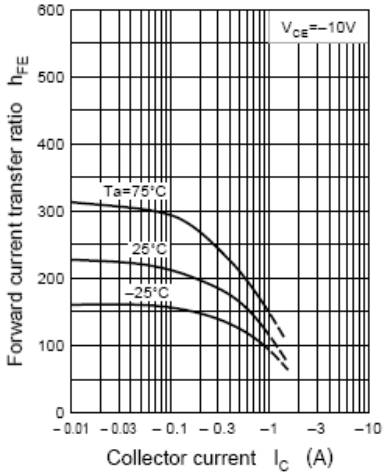


Silicon PNP epitaxial planer transistor 2SB766

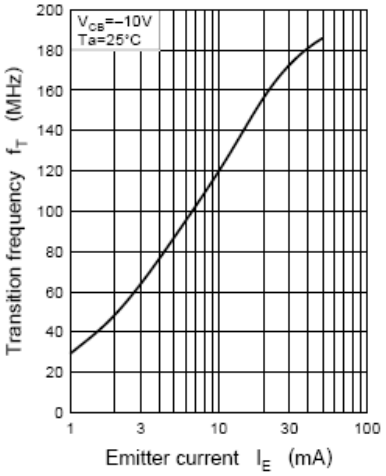
$V_{BE(sat)}$ — I_C



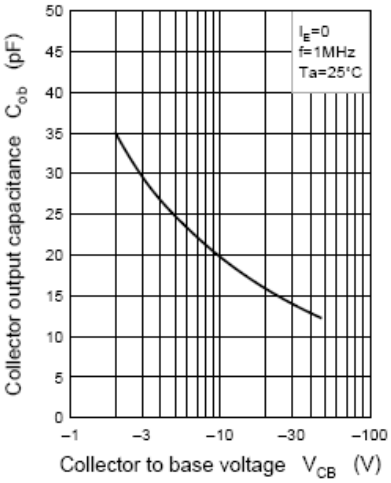
h_{FE} — I_C



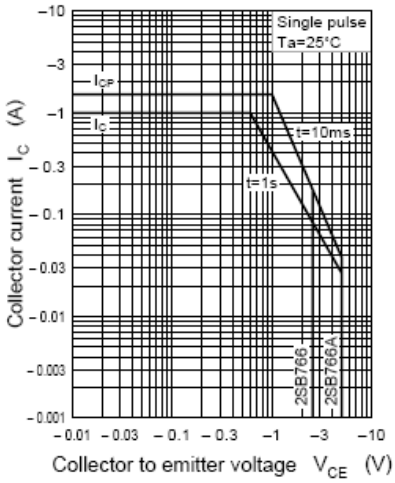
f_T — I_E



C_{ob} — V_{CB}



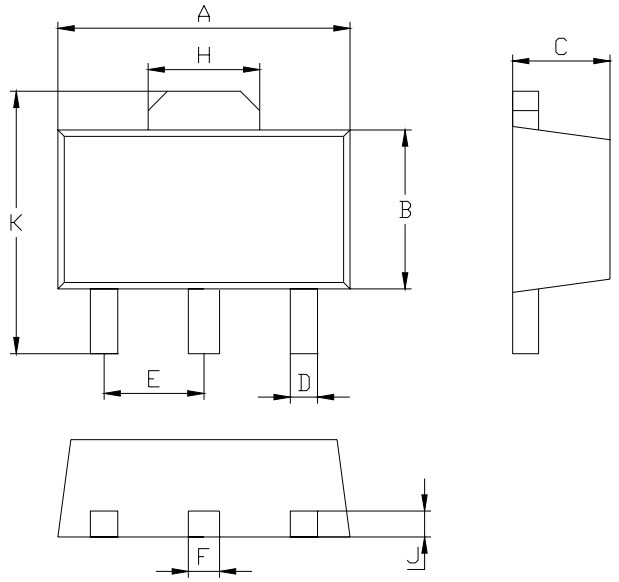
Area of safe operation (ASO)



Silicon PNP epitaxial planer transistor 2SB766

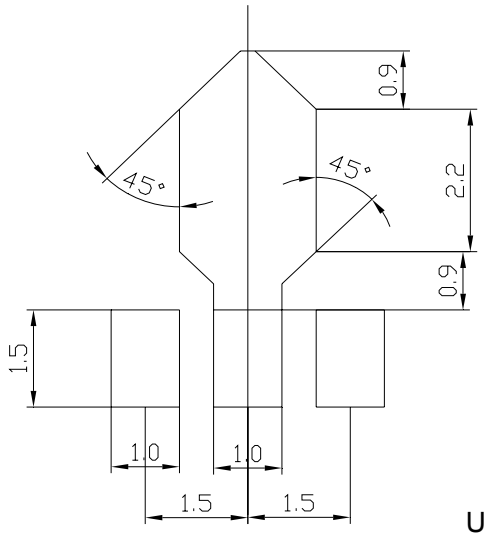
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.5	4.7
B	2.3	2.7
C	1.5Typical	
D	0.35	0.55
E	1.4	1.6
F	0.4	0.6
H	1.55	1.75
J	0.4Typical	
K	4.15	4.25
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
2SB766	SOT-89	1000/Tape&Reel