

Features

- Low $V_{CE(sat)}$.
- Complements the 2SD1766



SOT-89-3L

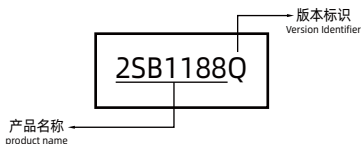
Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-2	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C/W}$
$R_{\theta JC}$	Thermal Resistance From Junction To Case($T_C=25^{\circ}\text{C}$)	45	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~150	$^{\circ}\text{C}$

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

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-50\mu\text{A}$, $I_E=0$	-40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1\text{mA}$, $I_B=0$	-32			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-50\mu\text{A}$, $I_C=0$	-5			V
I_{CBO}	Collector cut-off current	$V_{CB}=-20\text{V}$, $I_E=0$			-1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-4\text{V}$, $I_C=0$			-1	μA
h_{FE}	DC current gain	$V_{CE}=-3\text{V}$, $I_C=-0.5\text{A}$	82		390	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-2\text{A}$, $I_B=-0.2\text{A}$			-0.8	V
f_T	Transition frequency	$V_{CE}=-5\text{V}$, $I_C=-0.5\text{A}$, $f=30\text{MHz}$		100		MHz
C_{ob}	Collector output capacitance	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$		50		pF

Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE}(1)$	Qty(PCS)
2SB1188Q	SOT-89-3L		BCQ	120-270	1000
2SB1188R			BCR	180-390	



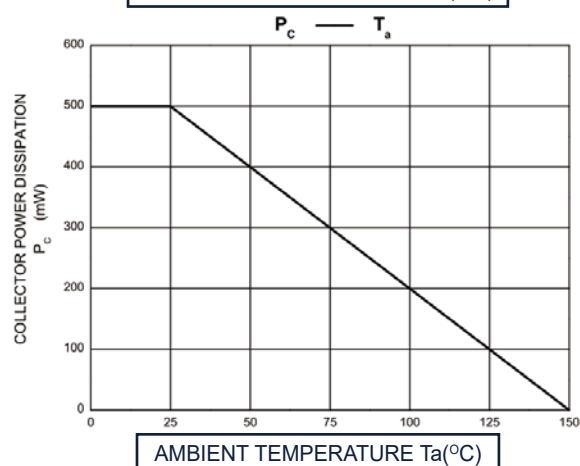
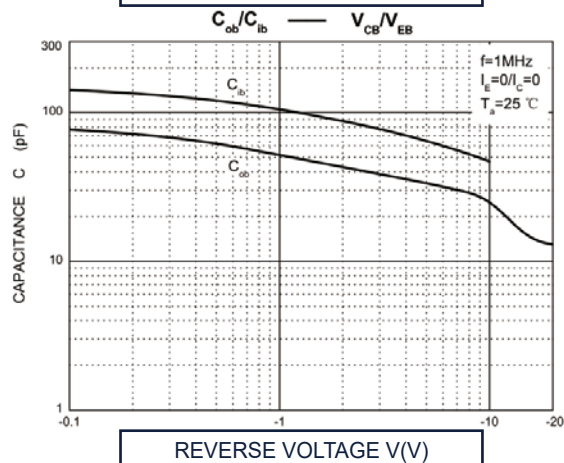
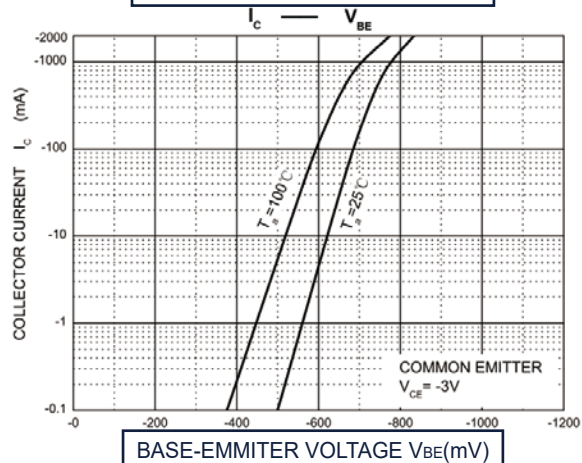
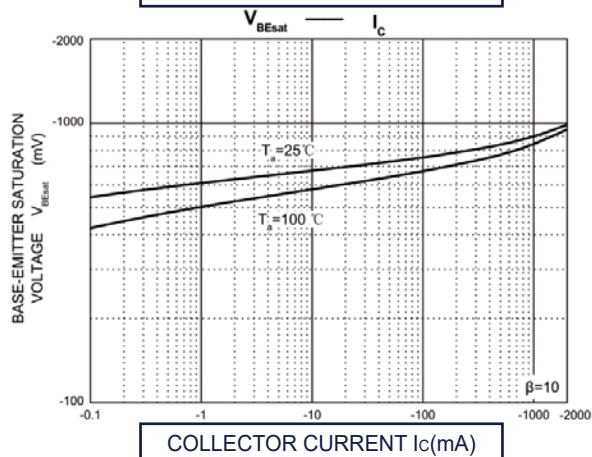
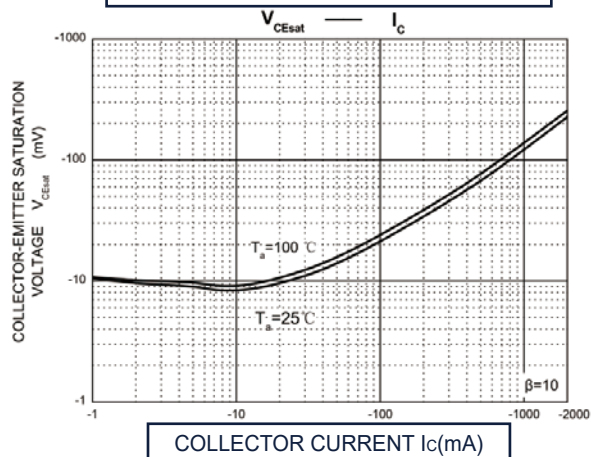
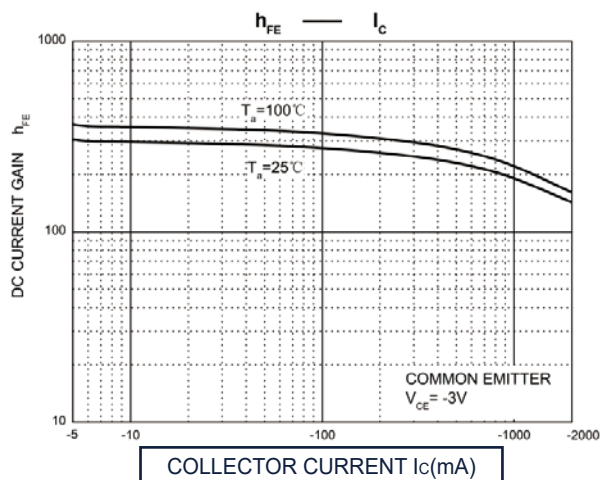
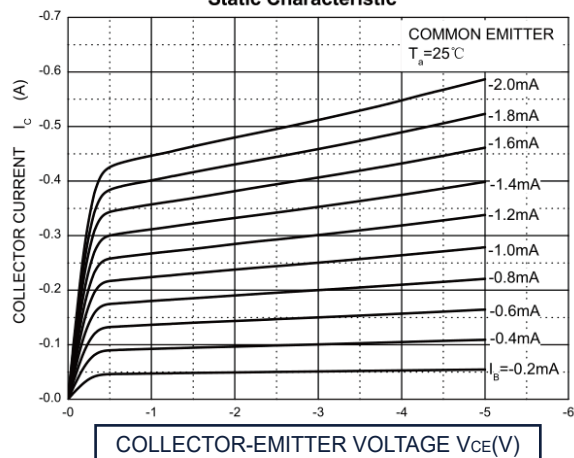
TWTLSEMI

TL-2SB1188Q

SOT-89-3L Plastic-Encapsulate Transistors (PNP)

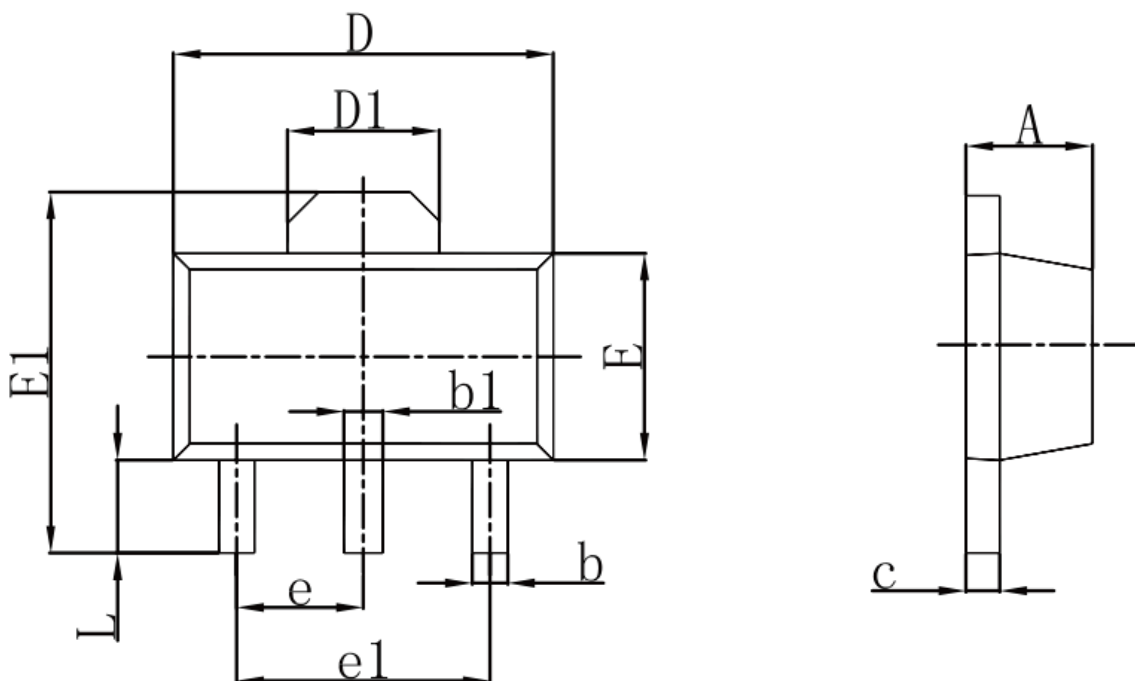
Typical Characteristics

Static Characteristic





SOT-89-3L Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047