

Features

- High voltage
- Large continuous collector current capability



SOT-89-3L

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C/W}$

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

Symbol	Parameter	Test conditions	Min	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-100\mu\text{A}, I_E=0$	-160		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1\text{mA}, I_B=0$	-160		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-10\mu\text{A}, I_C=0$	-6		V
I_{CBO}	Collector cut-off current	$V_{CB}=-150\text{V}, I_E=0$		-1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6\text{V}, I_C=0$		-1	μA
h_{FE}	DC current gain	$V_{CE}=-5\text{V}, I_C=-200\text{mA}$	60	320	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-500\text{mA}, I_B=-50\text{mA}$		-1.5	V
V_{BE}	Base-emitter voltage	$I_C=-5\text{mA}, V_{CE}=-5\text{V}$		-0.75	V
f_T	Transition frequency	$V_{CE}=-5\text{V}, I_C=-200\text{mA}$	15		MHz

Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE}(1)$	Qty(PCS)
2SA1013	SOT-89-3L	2SA1013 产品名称 product name	1013	160-320	1000



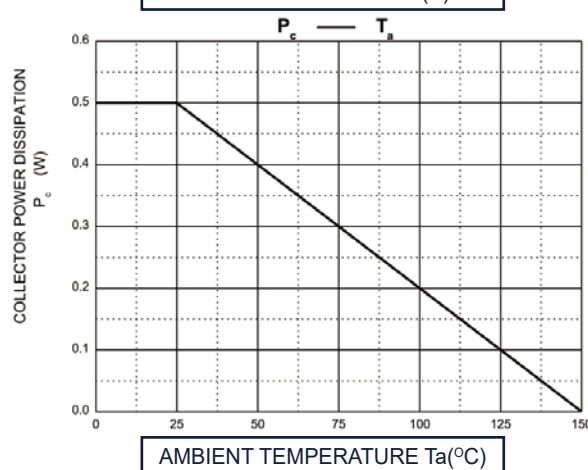
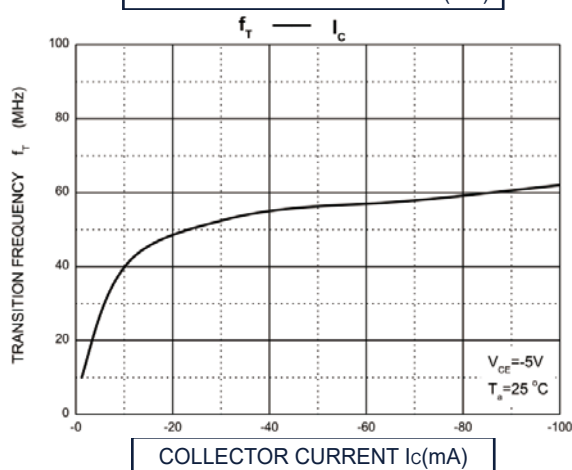
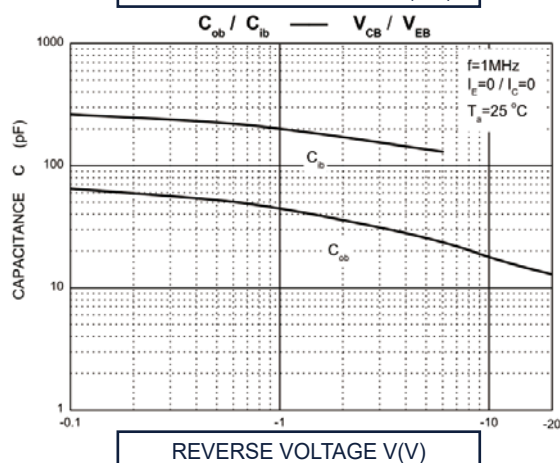
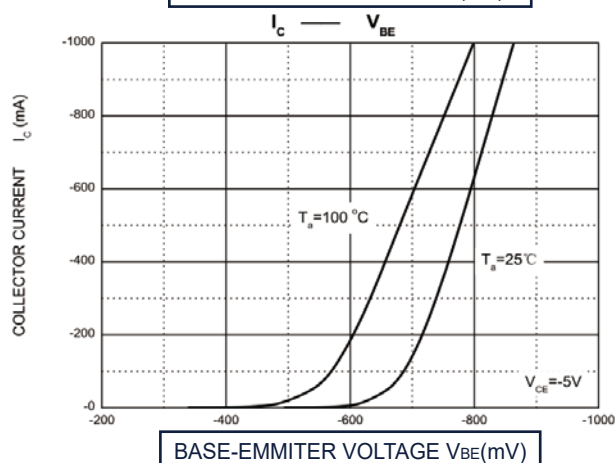
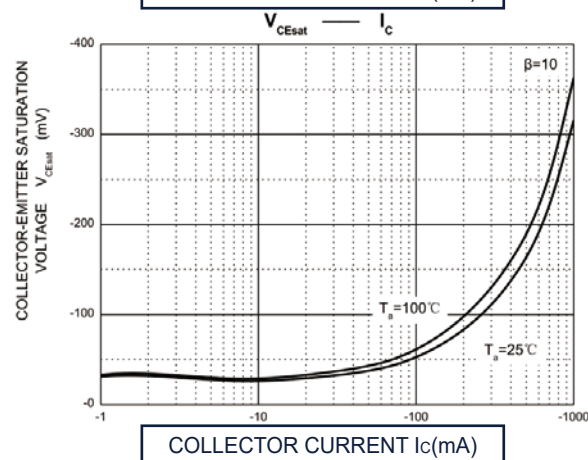
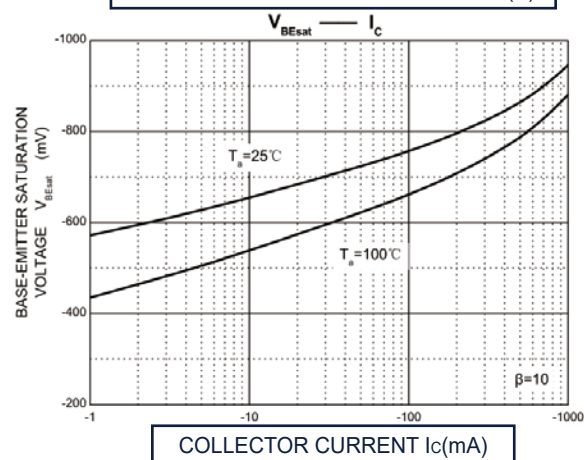
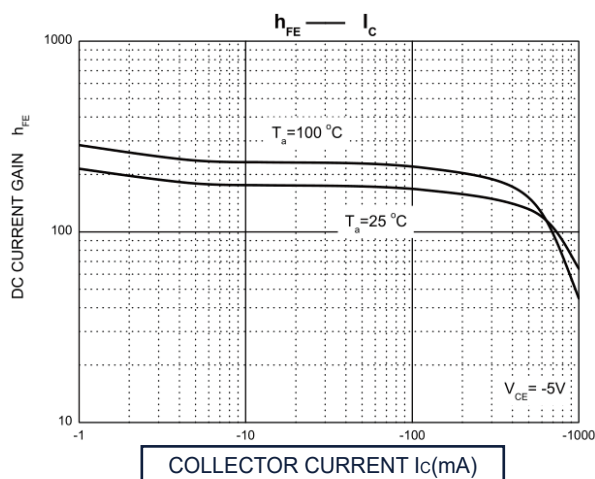
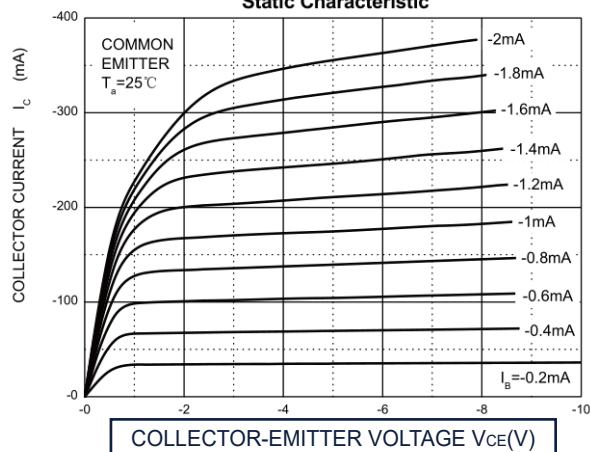
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SOT-89-3L Plastic-Encapsulate Transistors (PNP)

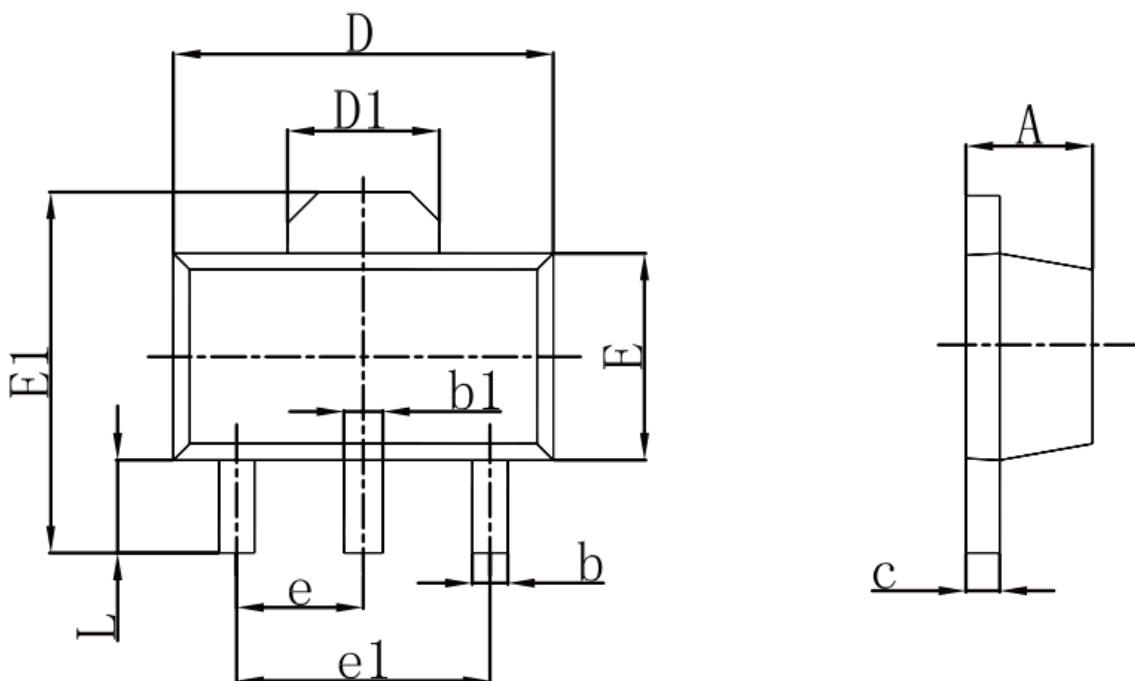
Typical Characteristics

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