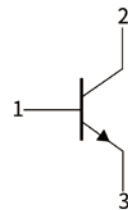


Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1
- High-speed switching



SOT-89-3L



Equivalent Circuit

Absolute Maximum Ratings(T_A=25℃)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current	0.2	A
P _C	Collector Power Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	℃
T _J ,T _{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	℃

Electrical Characteristics (T_A=25℃ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA, I _E =0	60			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA, I _B =0	40			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10μA, I _C =0	6			V
I _{CBO}	Collector cut-off current	V _{CE} =30V			50	nA
I _{EBO}	Emitter cut-off current	V _{EB} =6V			50	nA
h _{FE(1)}	DC current gain	V _{CE} =1V, I _C =0.1mA	60			
h _{FE(2)}		V _{CE} =1V, I _C =1mA	80			
h _{FE(3)}		V _{CE} =1V, I _C =10mA	100		300	
h _{FE(4)}		V _{CE} =1V, I _C =50mA	60			
h _{FE(5)}		V _{CE} =1V, I _C =100mA	30			
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =10mA, I _B =1mA			0.2	V
V _{CE(sat)}		I _C =50mA, I _B =5mA			0.3	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =10mA, I _B =1mA	0.65		0.85	V
V _{BE(sat)}		I _C =50mA, I _B =5mA			0.95	V
f _T	Transition frequency	V _{CE} =20V, I _C =10mA, f=100MHz	300			MHz
C _{obo}	Output Capacitance	V _{CB} =5V, I _E =0, f=1MHz			4	pF
C _{ibo}	Input Capacitance	V _{EB} =0.5V, I _C =0, f=1MHz			8	pF
NF	Noise Figure	V _{CE} =5V, I _C =0.1mA, R _s =1KΩ, f=10Hz to 15.7KHz			5	dB
t _d	Delay time	I _C =10mA, I _{B1} =-I _{B2} =1mA			35	ns
t _r	Rise time				35	ns
t _s	Storage time				200	ns
t _f	Fall time				50	ns

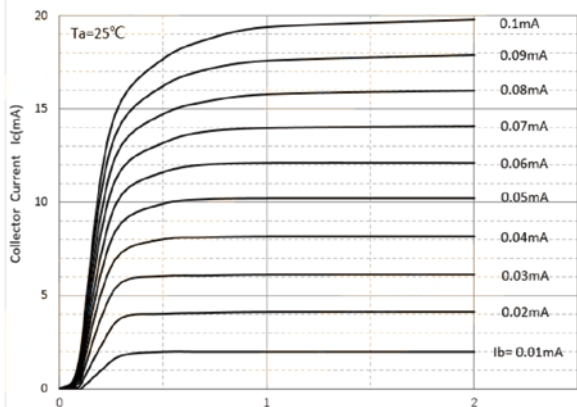
Ordering information

Product ID	Pack	Naming rule	Marking	hFE(1)	Qty(PCS)
PXT3904	SOT-89-3L	PXT3904 产品名称 product name	1A	100-300	1000

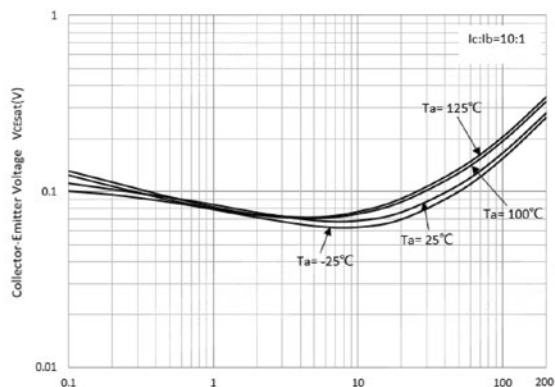


Typical Characteristics

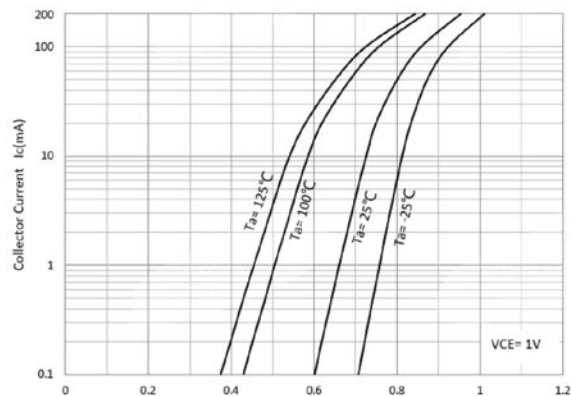
Static Characteristic

COLLECTOR-EMITTER VOLTAGE V_{CE} (V)

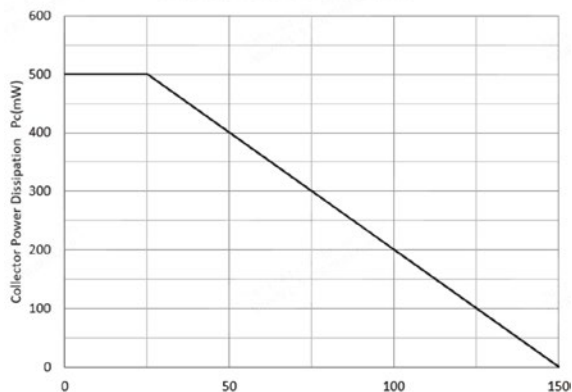
Collector-Emitter Saturation Voltage

COLLECTOR CURRENT I_c (mA)

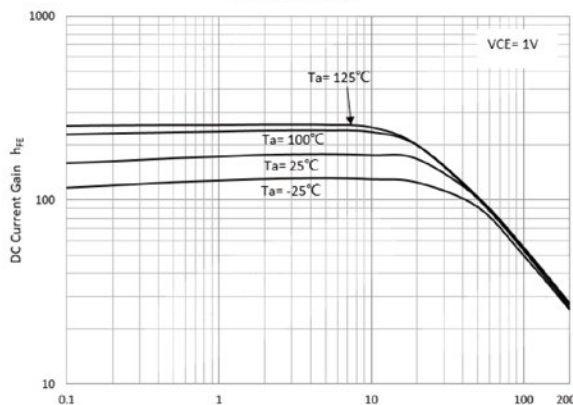
Base-Emitter On Voltage

BASE-EMITTER VOLTAGE V_{BE} (V)

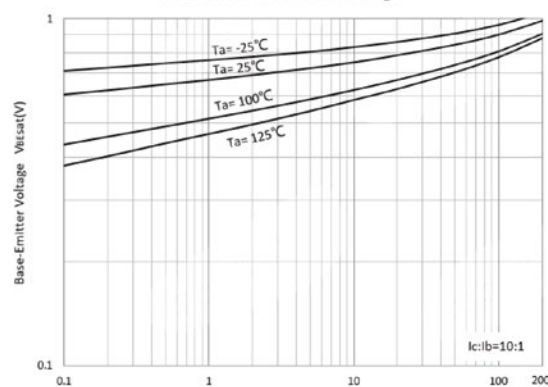
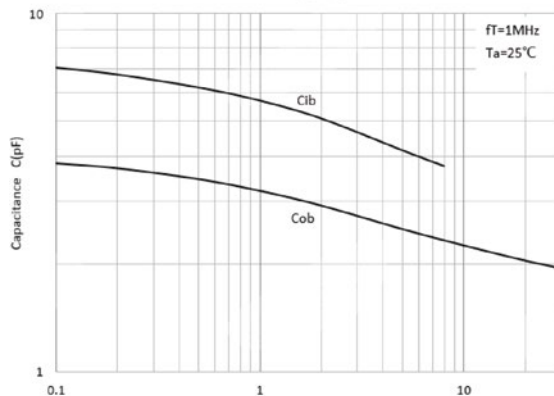
Collector Power Derating Curve

AMBIENT TEMPERATURE T_a ($^\circ\text{C}$)

DC Current Gain

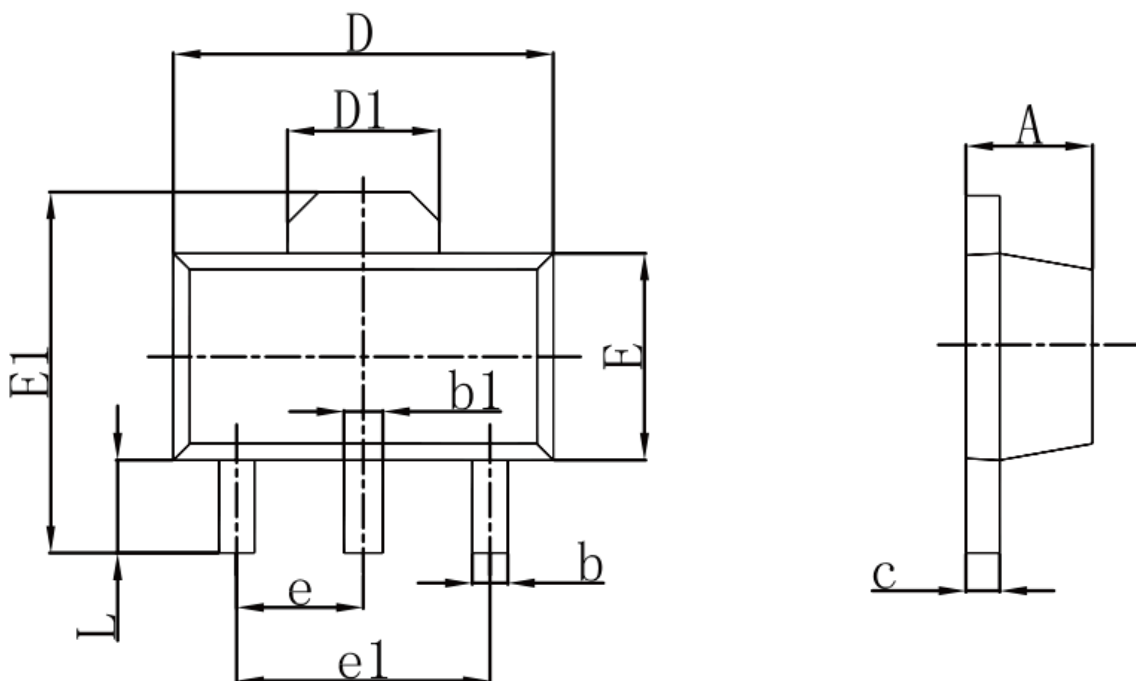
COLLECTOR CURRENT I_c (mA)

Base-Emitter Saturation Voltage

COLLECTOR CURRENT I_c (mA) $C_{ob}/C_{ib}-V_{CE}/V_{EB}$ REVERSE VOLTAGE V_R (V)



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