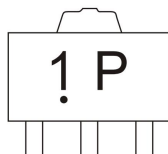


PXT2222A TRANSISTOR (NPN)

FEATURES

- Epitaxial planar die construction
- Complementary PNP Type available(PXT2907A)

MARKING



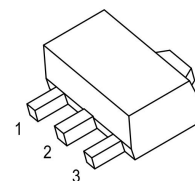
Solid dot = Green molding compound device.

SOT-89-3L

1. BASE

2. COLLECTOR

3. EMITTER

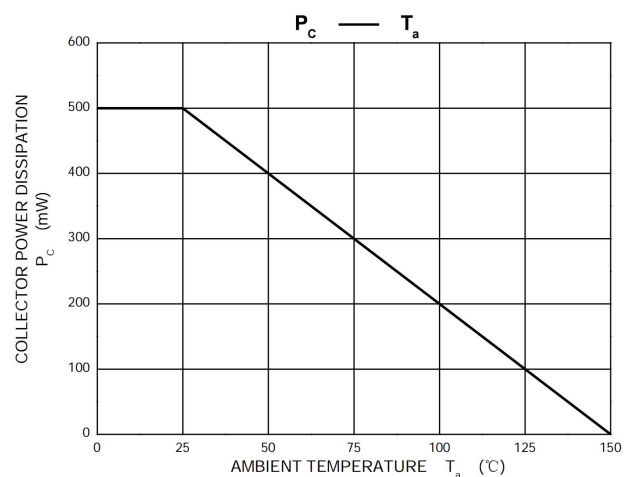
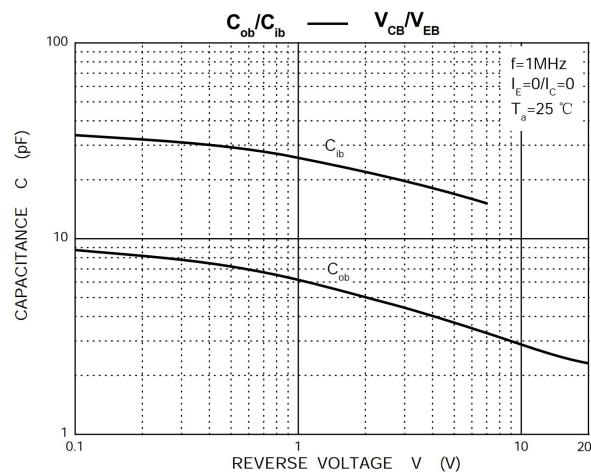
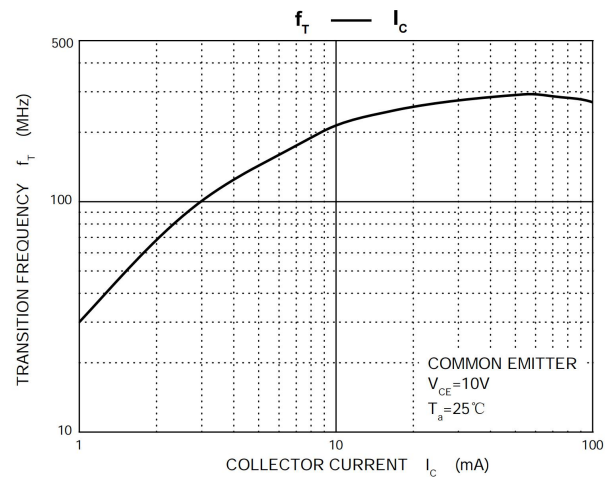
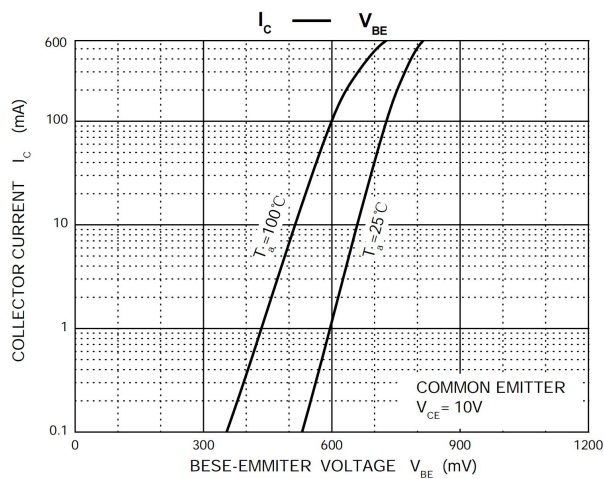
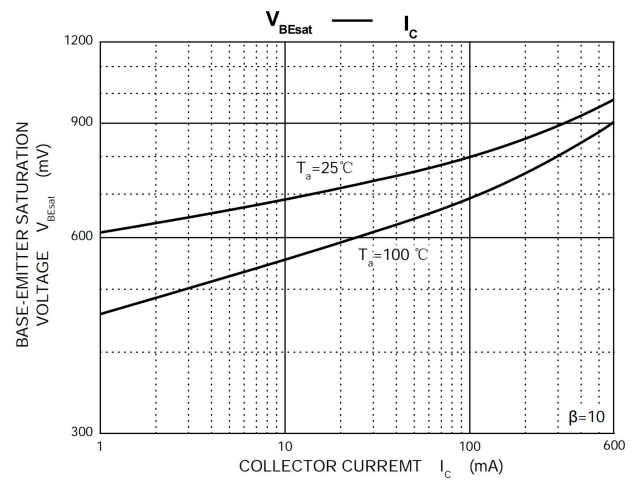
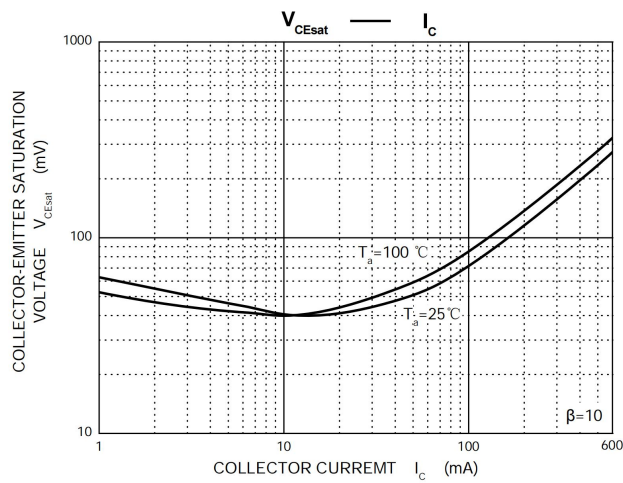
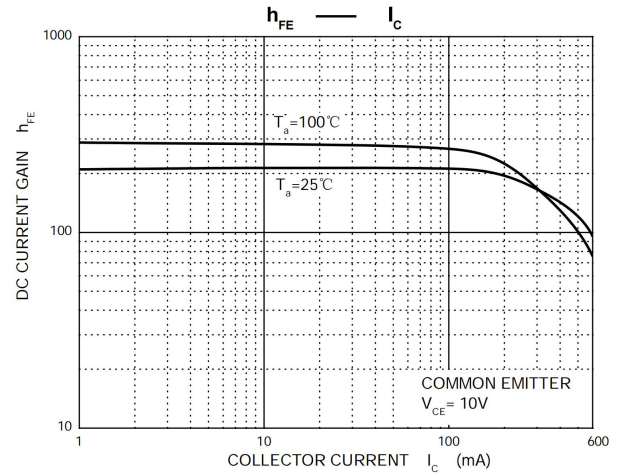
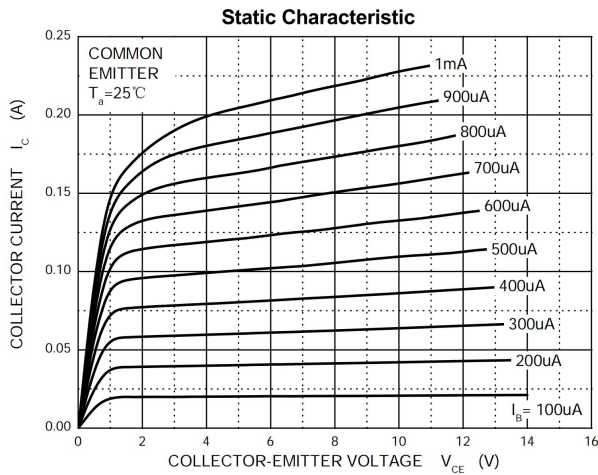


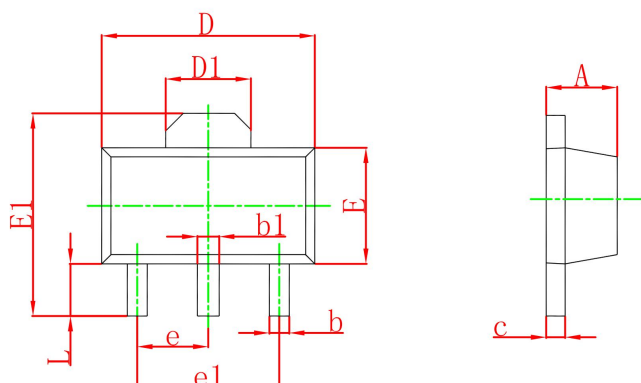
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	75	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	600	mA
P _C	Collector Power Dissipation	0.5	W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55 ~150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

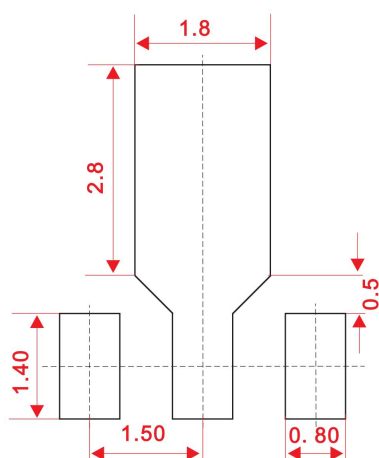
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E =0	75		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 10mA, I _B =0	40		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6		V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0		0.01	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0		0.01	μA
DC current gain	h _{FE(1)}	V _{CE} =10V, I _C = 0.1mA	35		
	h _{FE(2)}	V _{CE} =10V, I _C = 1mA	50		
	h _{FE(3)}	V _{CE} =10V, I _C = 10mA	75		
	h _{FE(4)}	V _{CE} =10V, I _C = 150mA	100	300	
	h _{FE(5)}	V _{CE} =1V, I _C = 150mA	50		
	h _{FE(6)}	V _{CE} =10V, I _C = 500mA	40		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B = 50mA		1	V
	V _{CE(sat)}	I _C =150mA, I _B =15mA		0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =500mA, I _B =50mA		2.0	V
	V _{BE(sat)}	I _C =150mA, I _B =15mA	0.6	1.2	V
Transition frequency	f _T	V _{CE} =10V, I _C =20mA f=100MHz	300		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, I _E = 0, f=1MHz		8	pF
Delay time	t _d	V _{CC} =30V, I _C =150mA		10	ns
Rise time	t _r	V _{BE(off)} =0.5V, I _{B1} =15mA		25	ns
Storage time	t _S	V _{CC} =30V, I _C =150mA		225	ns
Fall time	t _f	I _{B1} =- I _{B2} = 15mA		60	ns





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

SOT-89-3L Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.