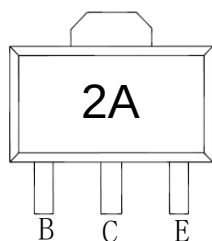


Features

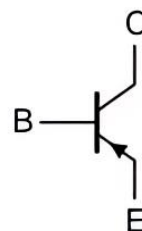
- Compliment to PXT3904
- Low current
- Low voltage



Marking and pin assignment



SOT-89-3L top view



Schematic diagram



Pb-Free



Halogen-Free

Maximum Ratings (Ta=25°C unless otherwise noted)

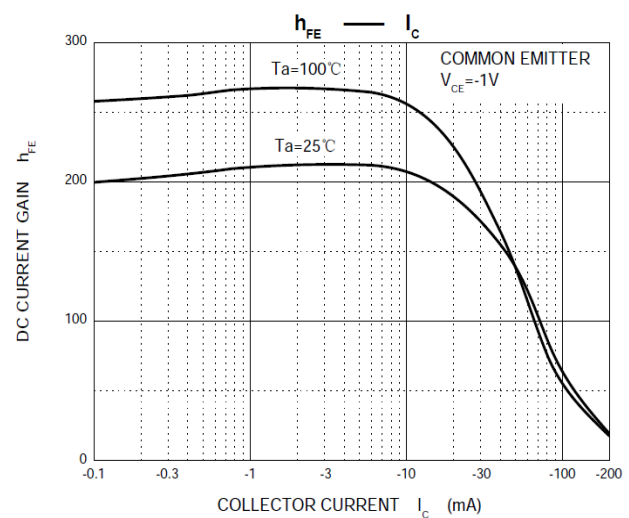
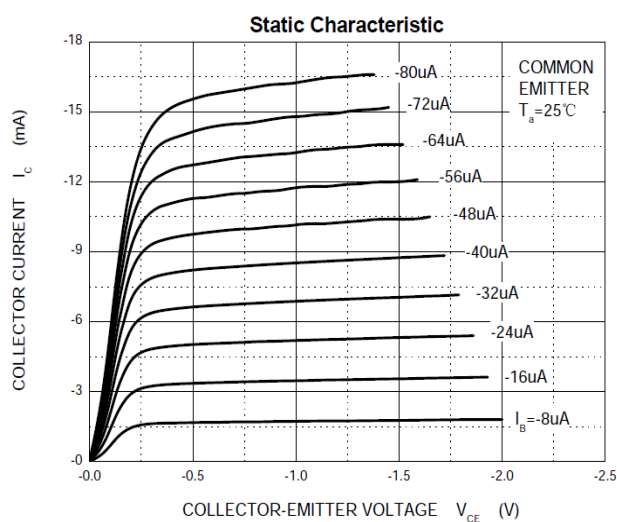
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-0.2	A
P_C	Collector Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

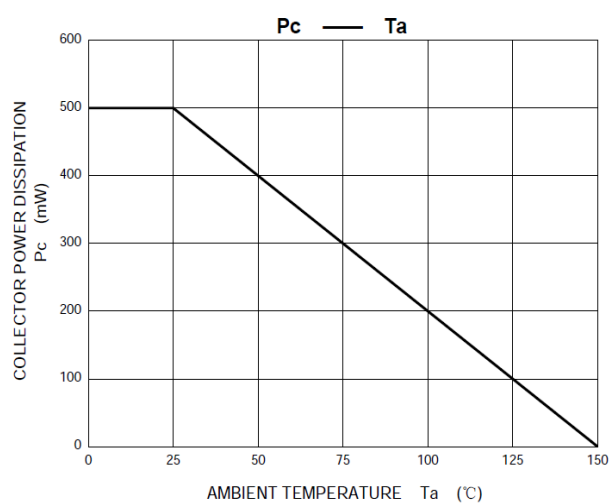
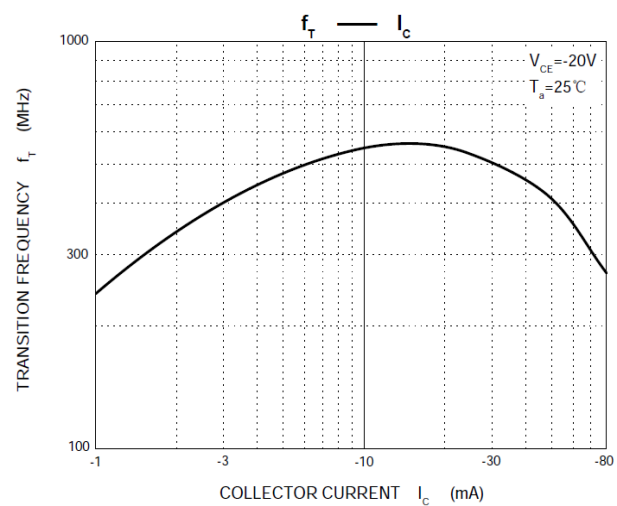
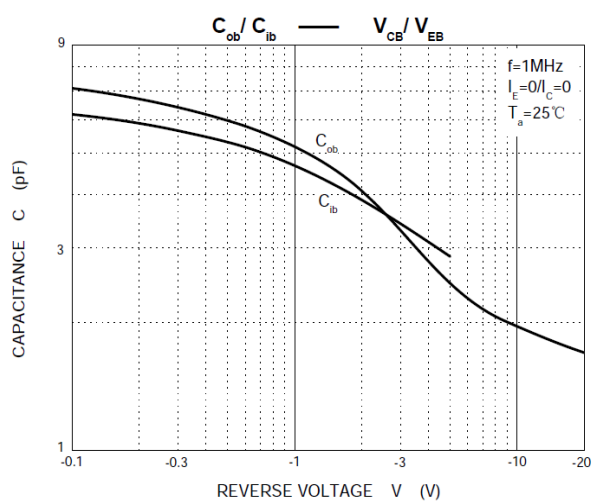
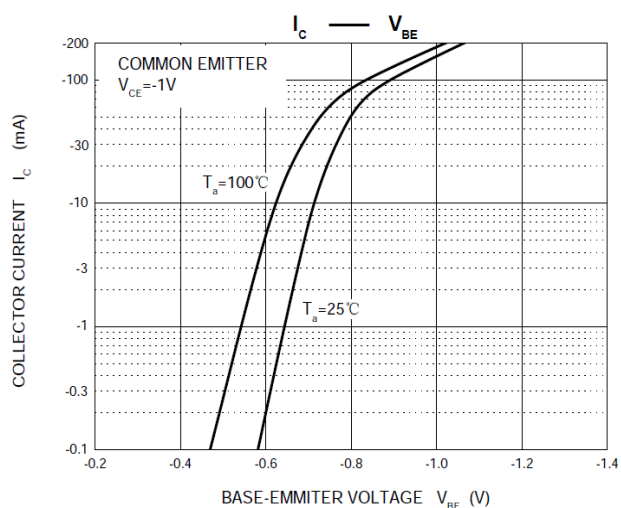
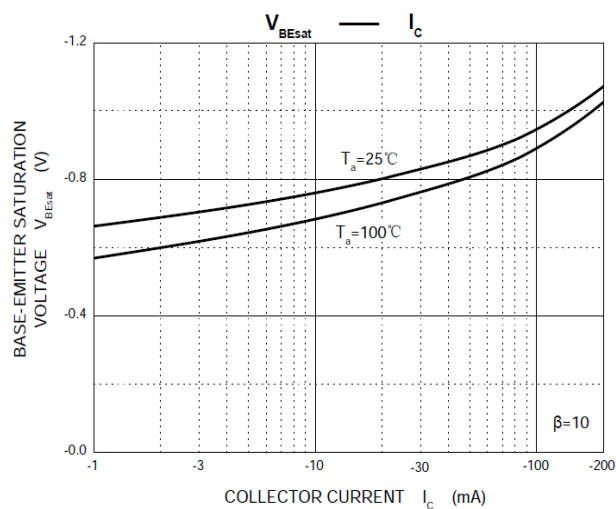
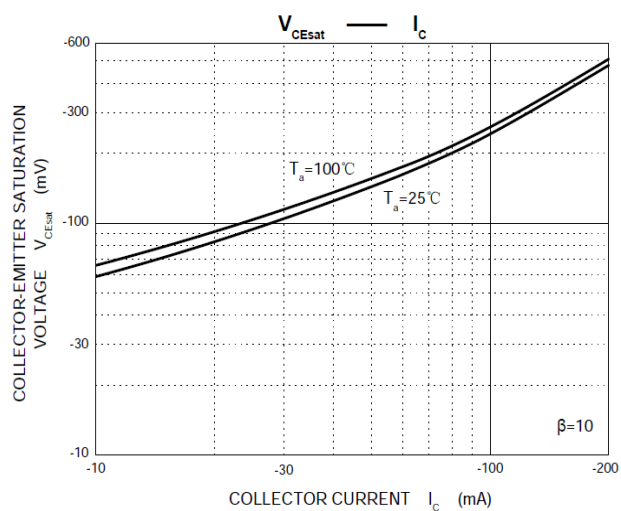
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PXT3906	SOT-89-3L	2A	1,000	10,000	40,000	7"reel

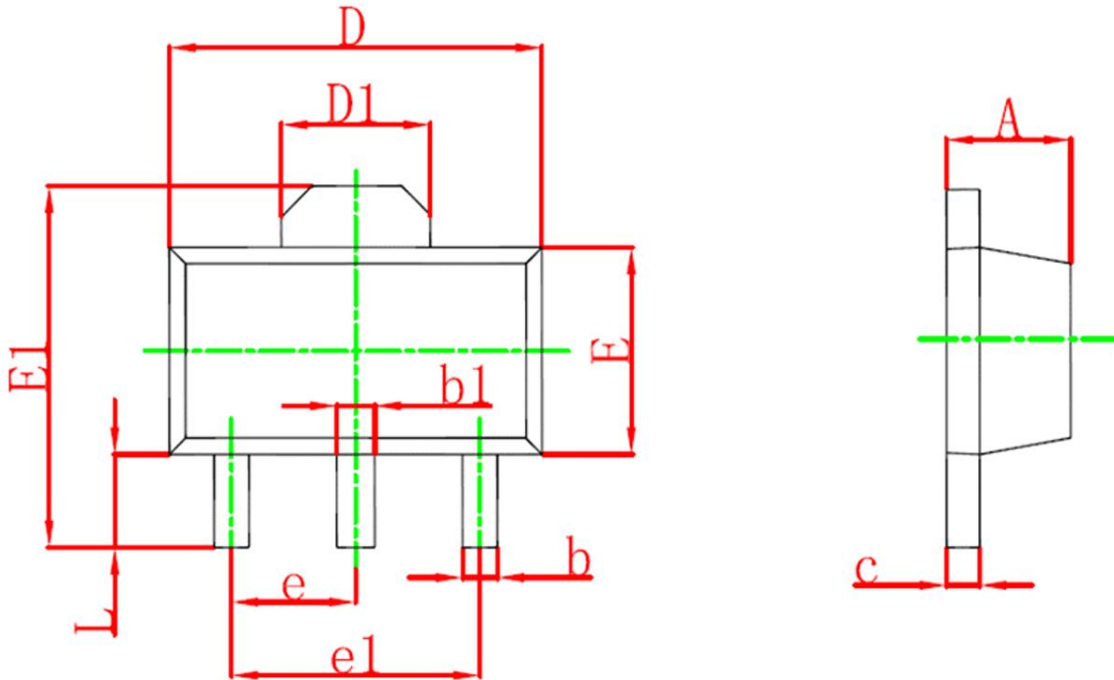
Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -10\mu A, I_E = 0$	-40	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1mA, I_B = 0$	-40	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -10\mu A, I_C = 0$	-6	--	--	V
I_{CBO}	Collector cut-off current	$V_{CB} = -30V, I_E = 0$	--	--	-0.05	μA
I_{CEX}	Collector cut-off current	$V_{CE} = -30V, V_{BE(off)} = -3V$	--	--	-0.05	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -6V, I_C = 0$	--	--	-0.05	μA
$H_{FE(1)}$	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	--	--	
$V_{CE(sat)1}$	Collector-emitter saturation voltage	$I_C = -10mA, I_B = -1mA$	--	--	-0.25	V
$V_{CE(sat)2}$		$I_C = -50mA, I_B = -5mA$	--	--	-0.4	V
$V_{BE(sat)1}$	Base-emitter saturation voltage	$I_C = -10mA, I_B = -1mA$	-0.65	--	-0.85	V
$V_{BE(sat)2}$		$I_C = -50mA, I_B = -5mA$	--	--	-0.95	V
C_c	Collector capacitance	$V_{CE} = -5V, I_E = 0, f = 1MHz$	--	--	4.5	pF
C_e	Emitter capacitance	$V_{EB} = -0.5V, I_C = 0, f = 1MHz$	--	--	10	pF
NF	Noise figure	$V_{CE} = -5V, I_C = -0.1mA, f = 10Hz-15.7kHz, R_S = 1K\Omega$	--	--	4	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		--	--	225	ns
t_f	Fall time		--	--	75	ns
f_T	Transition frequency	$V_{CE} = -20V, I_C = -10mA, f = 100MHz$	250	--	--	MHz

Typical Characteristics




SOT-89-3L Package information



Symbol	Dimensions in Millimeters(mm)		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