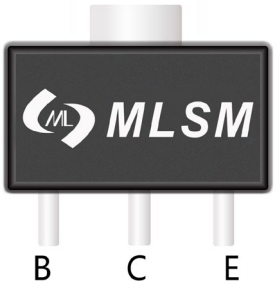
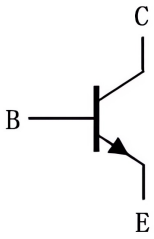
Features

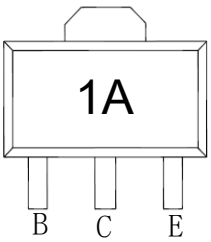
- Compliment to PXT3906
- Low current
- Low voltage



SOT-89-3L top view



Schematic diagram



Marking and pin assignment

Pb-Free RoHS Halogen-Free

Maximum Ratings (Ta=25℃ unless otherwise noted)

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	mA
P_C	Collector Power Dissipation	0.5	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

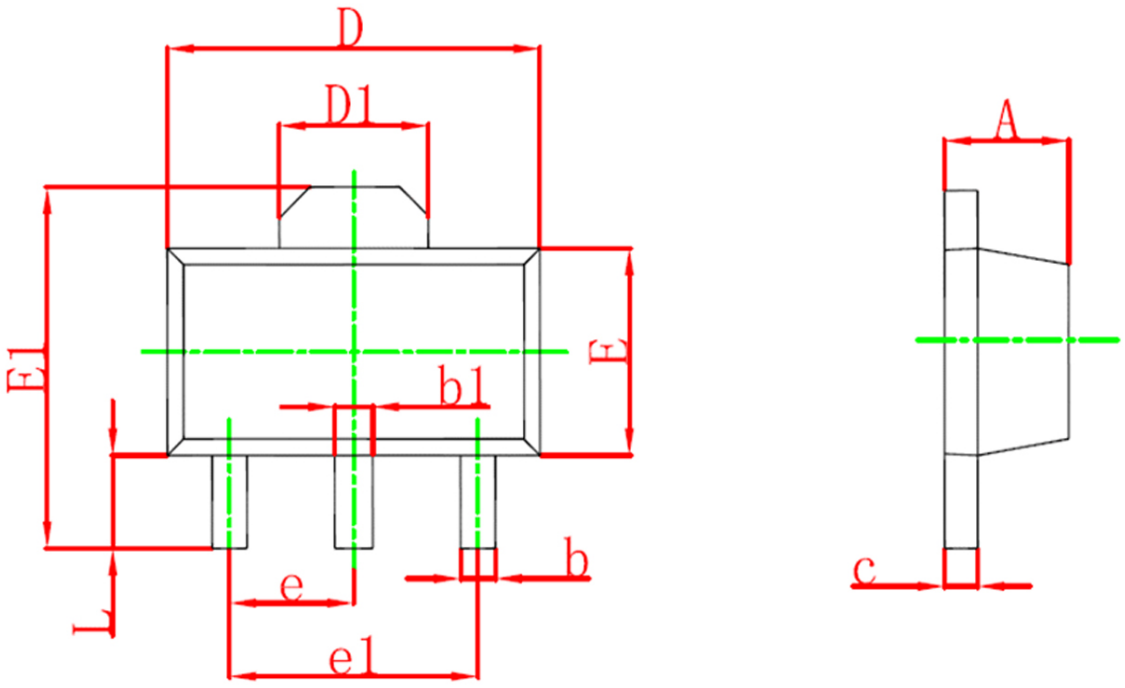
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PXT3904	SOT-89-3L	1A	1,000	10,000	40,000	7"reel

Electrical Characteristics (Ta=25℃ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=10μA,I_E=0	60	--	--	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=10μA,I_C=0	6	--	--	V
I_{CBO}	Collector cut-off current	V_{CB}=30V , I_E=0	--	--	0.05	μA
I_{CEX}	Collector ut-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	--	--	0.2	V
$V_{CE(sat)2}$		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
		I_C=50mA, I_B=5mA	--	--	0.95	V
C_c	Collector capacitance	V_{CB}=5V,I_E=0,f=1MHz	--	--	4	pF
C_e	Emitter capacitance	V_{EB}=0.5V,I_C=0,f=1MHz	--	--	8	pF
NF	Noise figure	V_{CE}=5V,Ic=0.1mA,f=10Hz-15.7kHz, R_S=1KΩ	--	--	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
f_T	Transition frequency	V_{CE}=20V,I_C=10mA,f=100MHz	300	--	--	MHz

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