

### **Features**

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

#### 1. BASE

2. COLLECTOR

3. EMITTER



## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
PXT2222A,115	SOT-89	1P	1000

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

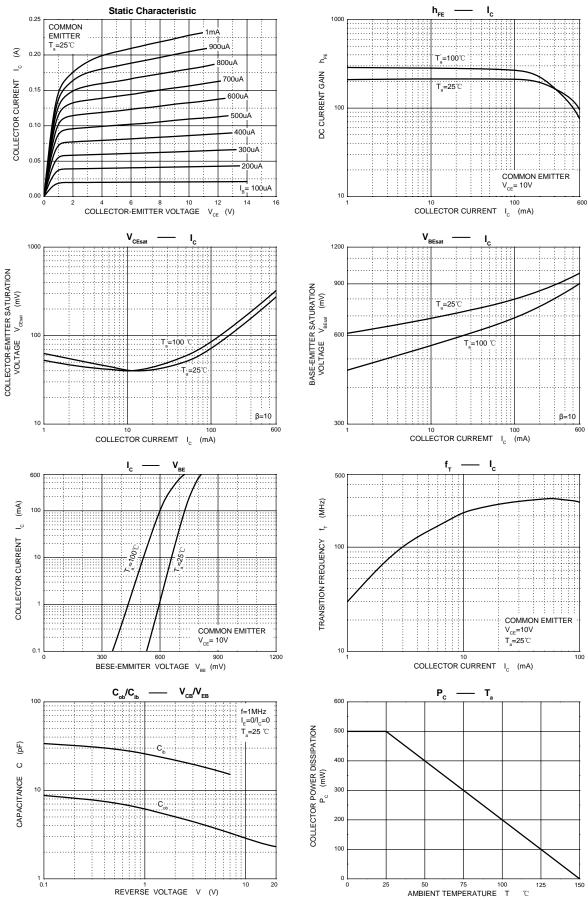
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	75	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
Ic	Collector Current -Continuous	600	mA
Pc	Collector Power Dissipation	0.5	W
$T_J,T_stg$	Operation Junction and Storage Temperature Range	-55~150	℃

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdownvoltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 10μ A,I <sub>E</sub> =0	75		V
Collector-emitter breakdownvoltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> =0	40		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	6		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0		0. 01	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V , I <sub>C</sub> =0		0. 01	μA
	h <sub>FE(1)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 0.1mA	35		
	h <sub>FE(2)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 1mA	50		
PC current gain	h <sub>FE(3)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 10mA	75		
	h <sub>FE(4)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 150mA	100	300	
	h <sub>FE(5)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 150mA	50		
	h <sub>FE(6)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 500mA	40		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> = 50mA		1	V
	V <sub>CE(sat)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.3	V
Door contitou activistics valtage	V <sub>BE(sat)</sub> I <sub>C</sub> =500mA, I <sub>B</sub> =	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		2.0	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA	0.6	1.2	V
Transition frequency	f⊤	V <sub>CE</sub> =10V, I <sub>C</sub> =20mA f=100MHz	300		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> = 0,f=1MHz		8	pF
Delay time	t <sub>d</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA		10	ns
Rise time	t <sub>r</sub>	$V_{BE(off)}=0.5V,I_{B1}=15mA$		25	ns
Storage time	ts	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA		225	ns
Fall time	t <sub>f</sub>	I <sub>B1</sub> =- I <sub>B2</sub> = 15mA		60	ns

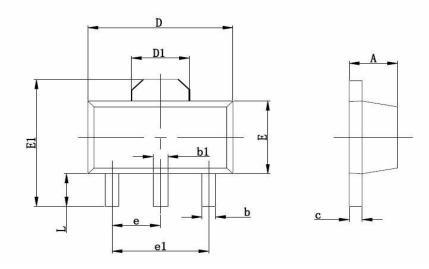


## **Typical Characteristics**

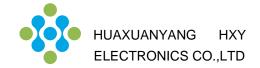




# **SOT-89 Package Outline Dimensions**



Cymhal	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	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	
С	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	
е	1.500 TYP.		0.060 TYP.		
e1	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047	



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