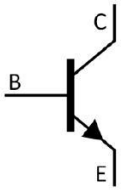
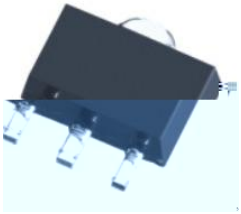
Silicon NPN transistor in a SOT-89 Plastic Package.

Complementary pair with 2SB647(A)T.

Low frequency power amplifier.





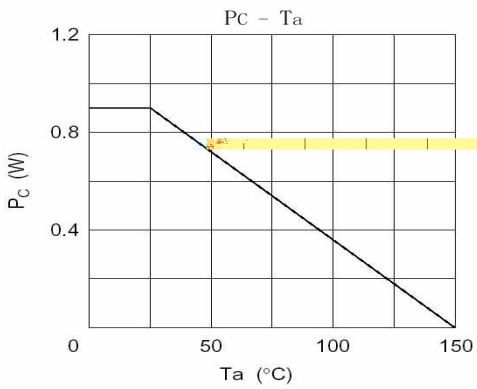
PIN1 Base PIN 2 Collector PIN 3 Emitter

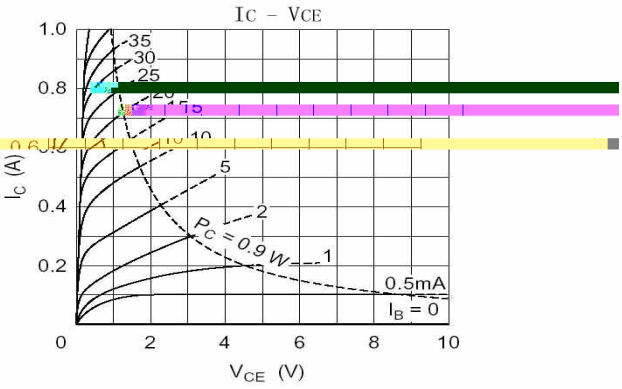
h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60˙ 120	100˙ 200	160˙ 320
Marking	H67B	H67C	H67D

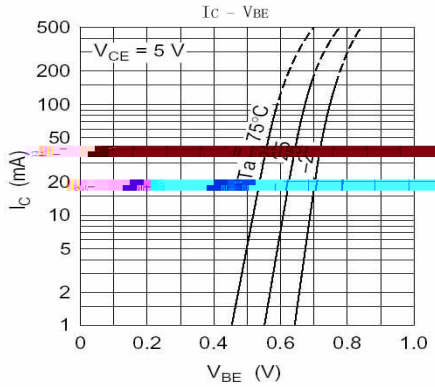
Parameter	Symbol		Rating	Unit
Collector to Base Voltage	V_{CBO}		120	V
Collector to Emitter Voltage	V_{CEO}	2SD667T	80	V
		2SD667AT	100	
Emitter to Base Voltage	V_{EBO}		5.0	V
Collector Current (DC)	I_C		1.0	A
Collector Current (Pulse)	I_{CP}		2.0	A
Collector Power Dissipation	P_C		500	mW
Collector Power Dissipation*	$*P_C$		1.0	W
Junction Temperature	T_j		150	
Storage Temperature Range	T_{stg}		-55˙ 150	

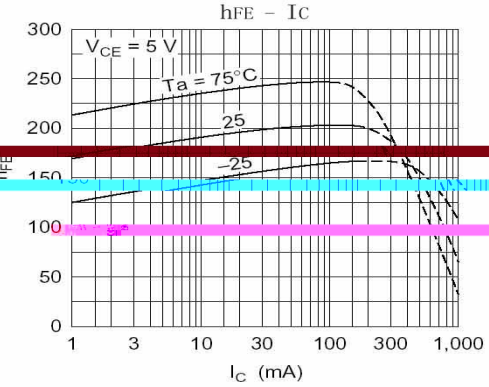
*:mounted on ceramic substrate($250mm^2$×0.8t).

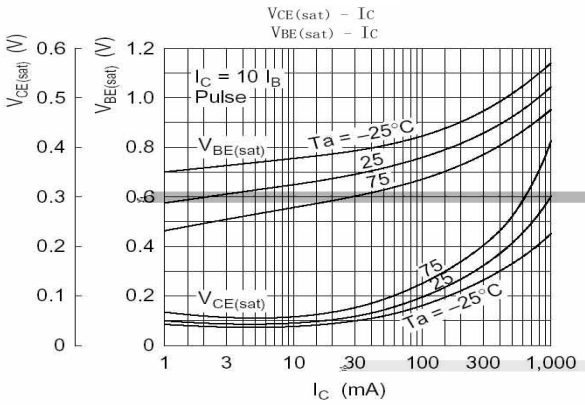
Parameter	Symbol		Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}		I_C=10μA I_E=0	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	2SD667T	I_C=1.0mA I_B=0	80			V
		2SD667AT		100			
Emitter to Base Breakdown Voltage	V_{EBO}		I_E=10μA I_C=0	5.0			V
Collector Cut-Off Current	I_{CBO}		V_{CB}=100V I_E=0			10	μA
DC Current Gain	$h_{FE(1)}$		V_{CE}=5.0V I_C=150mA	60		320	
	$h_{FE(2)}$		V_{CE}=5.0V I_C=500mA	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		I_C=500mA I_B=50mA			1.0	V
Base to Emitter Saturation Voltage	V_{BE}		V_{CE}=5.0V I_C=150mA			1.5	V
Transition Frequency	f_T		V_{CE}=5.0V I_C=150mA		140		MHz
Collector Output Capacitance	C_{ob}		V_{CB}=10V I_E=0 f=1.0MHz		12		pF

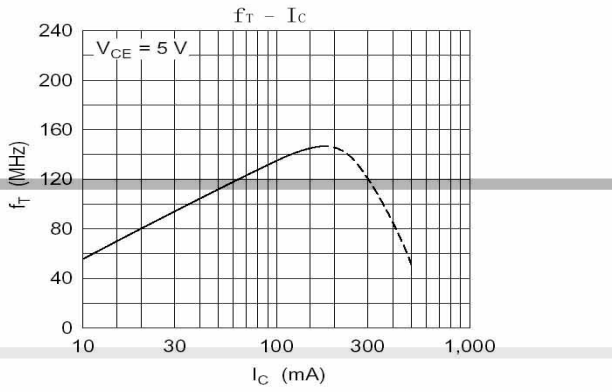

PC – Ta
PC (W)
Ta (°C)
0
50
100
150
0.4
0.8
1.2


IC – VCE
IC (A)
VCE (V)
35
30
25
5
2
1
PC = 0.9 W
0.5mA
IB = 0
0.2
0.4
0.8
1.0
2
4
6
8
10

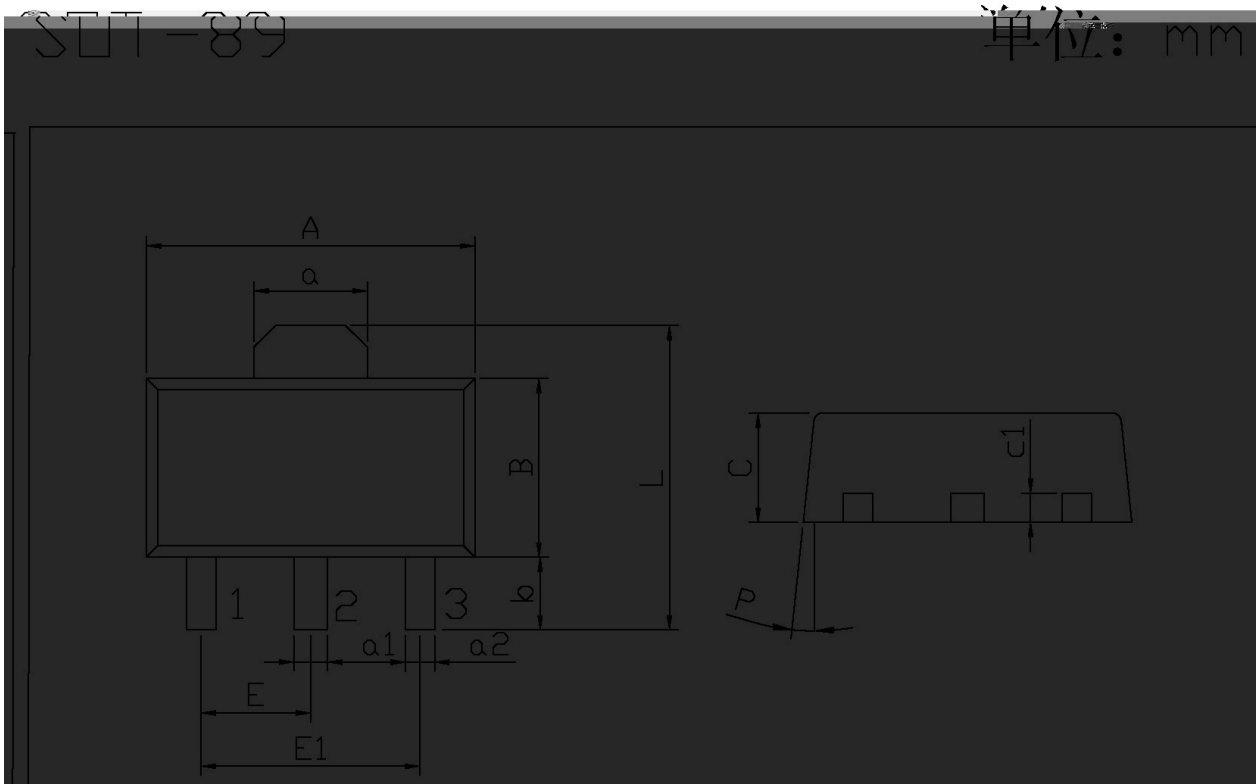

IC – VBE
VCE = 5 V
Ta
75°C
25
–25
IC (mA)
VBE (V)
500
200
100
50
20
10
5
2
1
0.2
0.4
0.6
0.8
1.0


hFE – IC
VCE = 5 V
Ta = 75°C
25
–25
hFE
IC (mA)
300
250
200
150
100
50
0
1
3
10
30
100
300
1,000

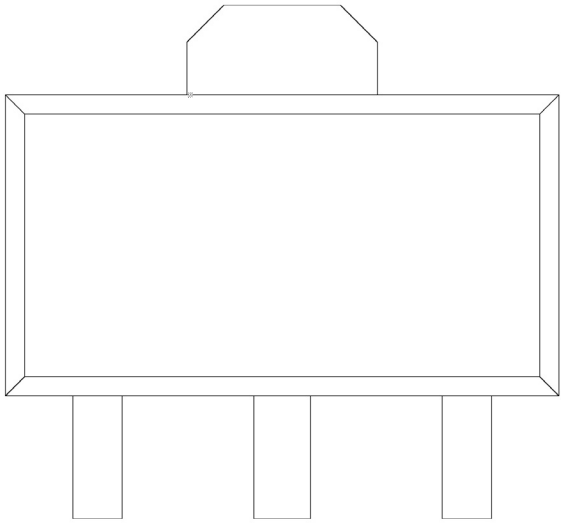

VCE(sat) – IC
VBE(sat) – IC
IC = 10 IB
Pulse
VBE(sat)
VCE(sat)
Ta = –25°C
25
75
IC (mA)
0.6
0.5
0.4
0.3
0.2
0.1
0
1.2
1.0
0.8
0.6
0.4
0.2
0
1
3
10
30
100
300
1,000


fT – IC
VCE = 5 V
fT (MHz)
IC (mA)
240
200
160
120
80
40
0
10
30
100
300
1,000

SOT-89 单位：mm

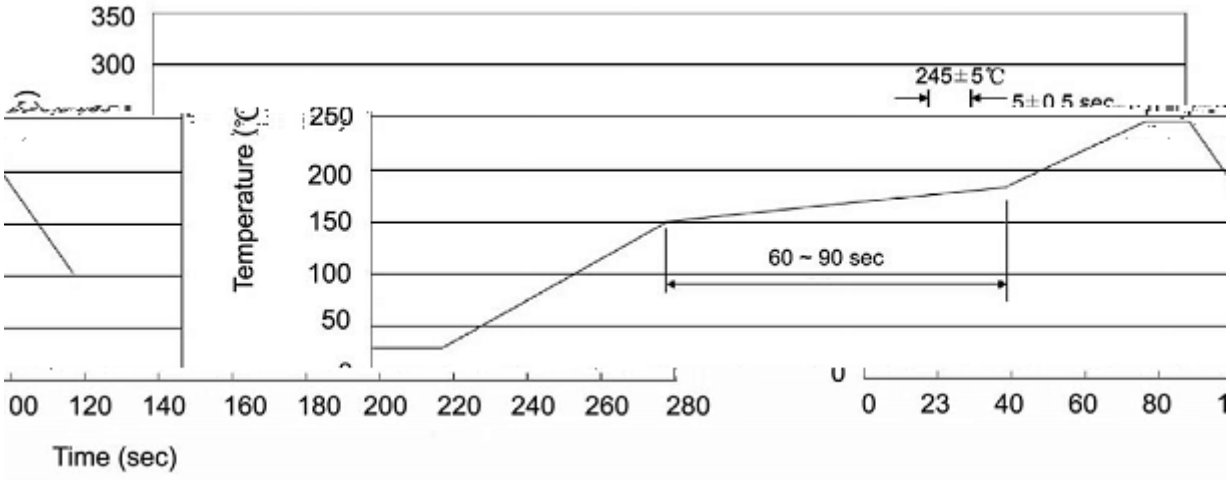


Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min.	Max.		Min	Max.
A	4.4	4.7	a1	0.36	0.56
B	2.35	2.65	a2	0.30	0.50
L	3.938	4.478	C	1.40	1.70
a	1.45	1.65	c1	0.35	0.50
E	1.40	1.60	P	6°	
E1	2.80	3.20			
b	0.80	1.20			



Note:

H:	Company Code.
67:	Product Type.
B:	h_{FE} Classifications Symbol
**:	Lot No. Code,code change with Lot No.


350
300
245±5℃
5±0.5 sec
Temperature (℃)
250
200
150
100
50
60 ~ 90 sec
00 120 140 160 180 200 220 240 260 280
0 23 40 60 80
Time (sec)