

/ Descriptions

Silicon NPN transistor in a SOT-89 Plastic Package.

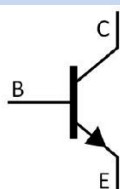
/ Features

Complementary pair with 2SB647(A)T.

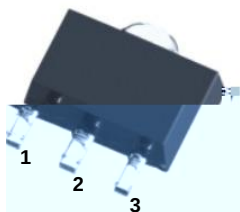
/ Applications

Low frequency power amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

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

/ Absolute Maximum Ratings(Ta=25)

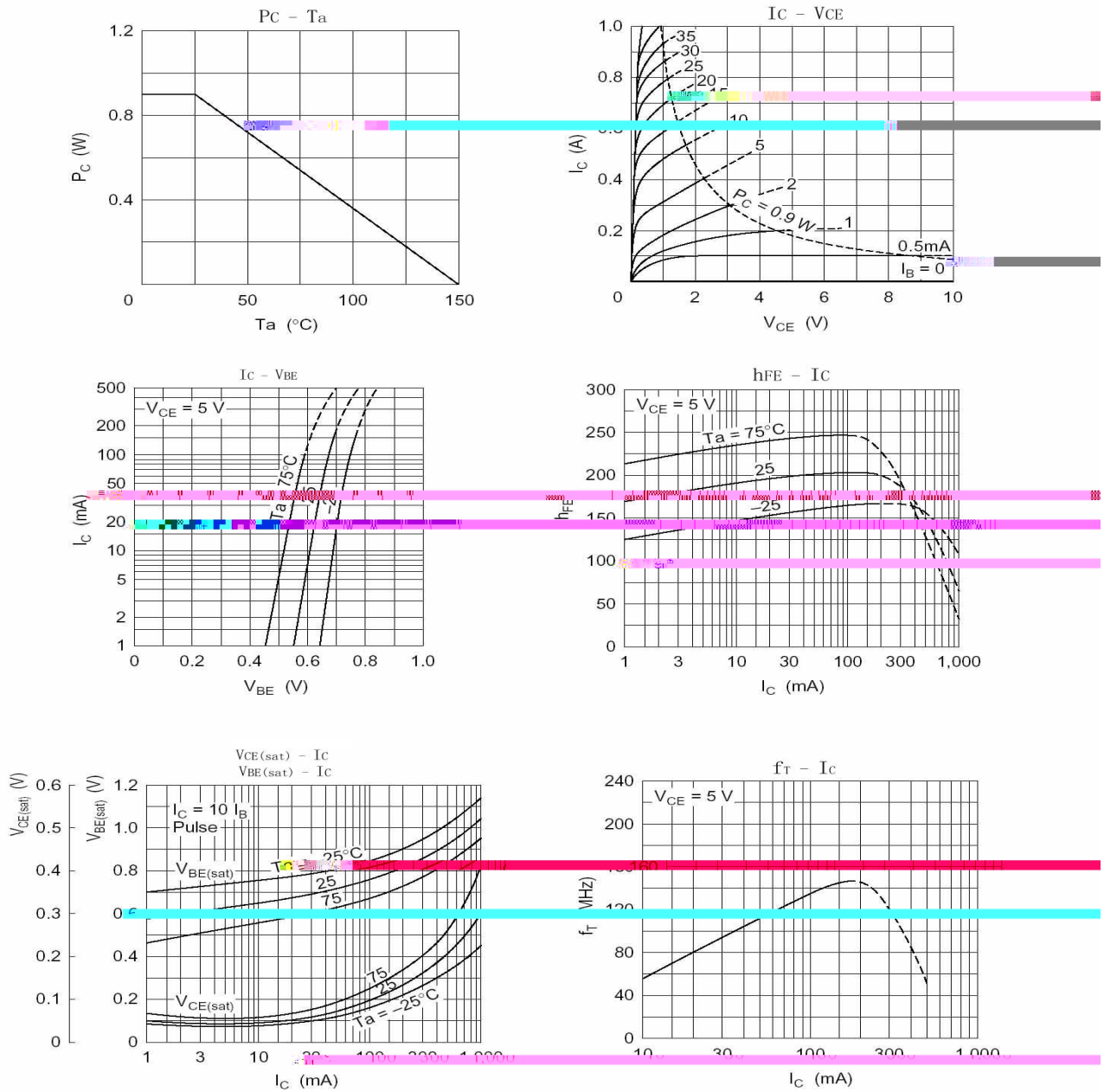
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	2SD667T 80	V
		2SD667AT 100	
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current (DC)	I_C	1.0	A
Collector Current (Pulse)	I_{CP}	2.0	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*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

*:mounted on ceramic substrate(250mm²×0.8t).

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	80			V
			100			
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	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

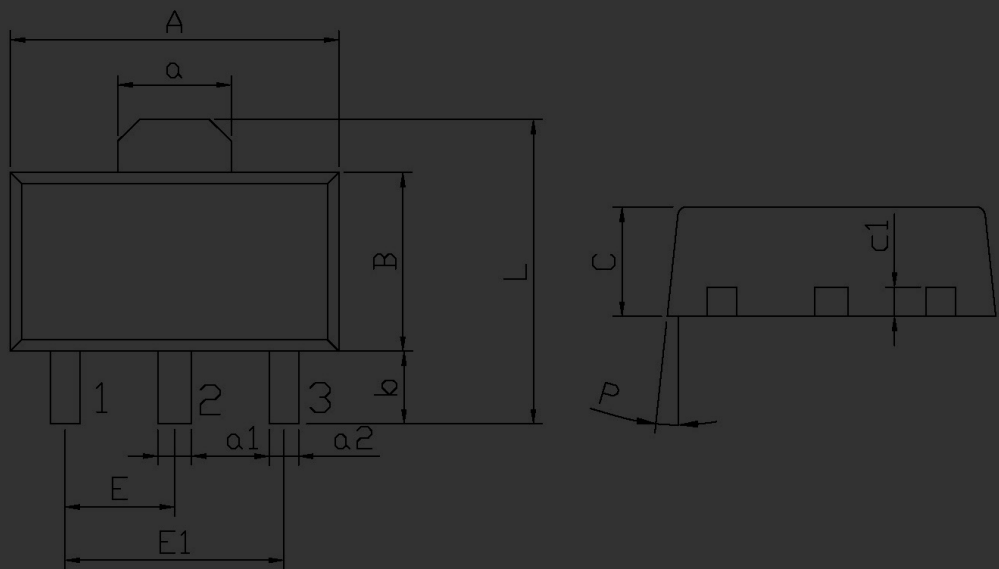
/ Electrical Characteristic Curve



/ Package Dimensions

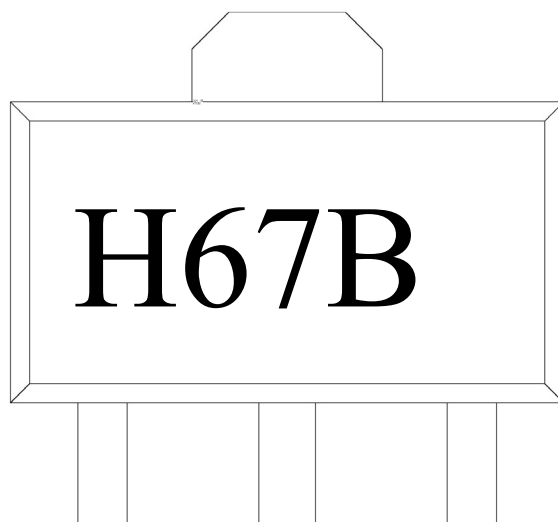
STT-89

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.4	4.7	a1	0.36	0.56
B	2.35	2.65	a2	0.30	0.50

/ Marking Instructions



Note:

H: Company Code.

67: Product Type.

B: h_{FE} Classifications Symbol

** : Lot No. Code,code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)