

/ Descriptions

Silicon NPN transistor in a SOT-89 Plastic Package.

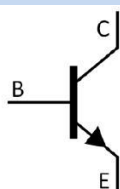
/ Features

Complementary pair with 2SB647(A)T.

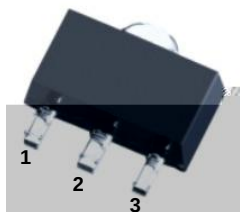
/ Applications

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)

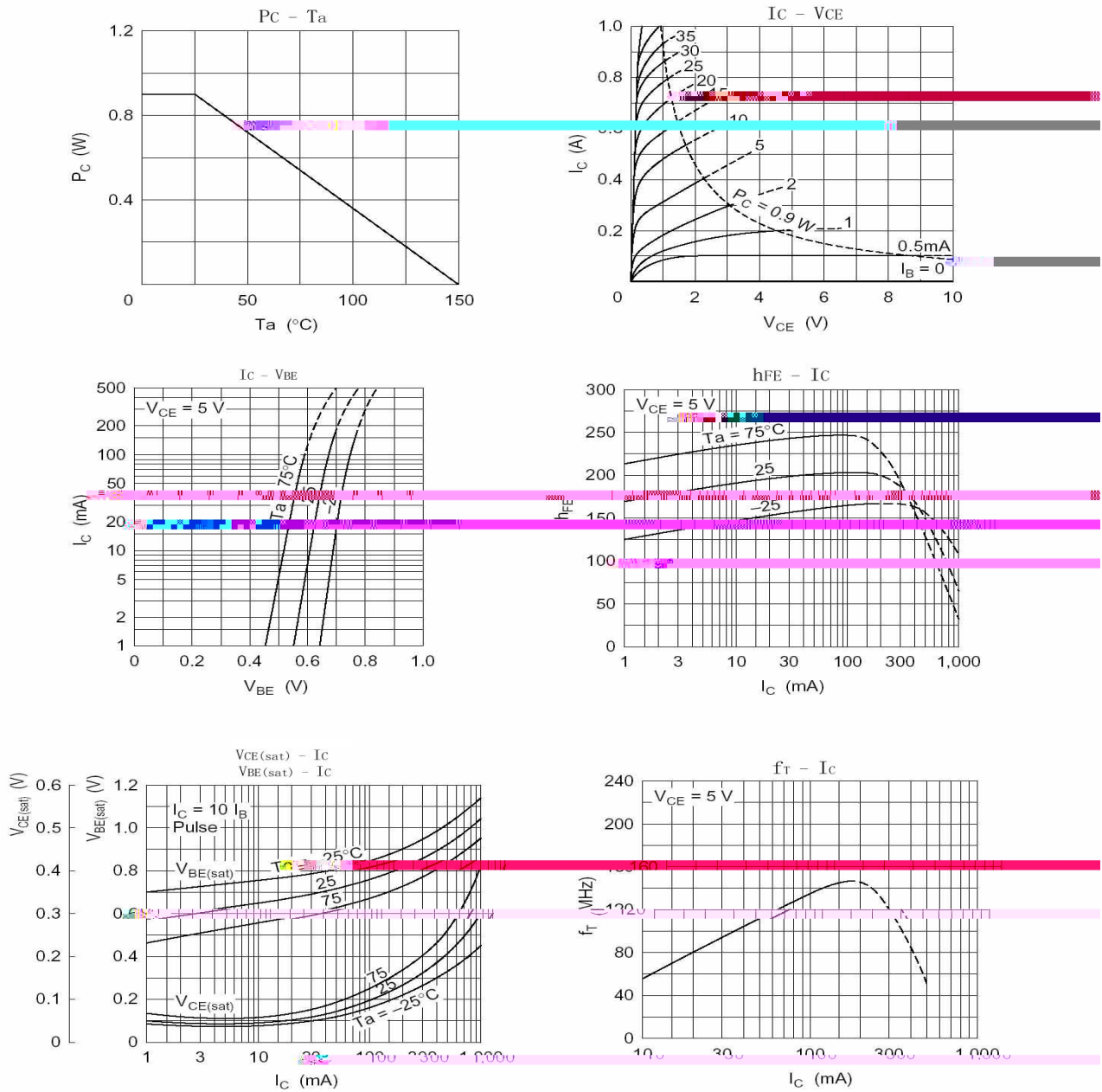
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	2SD667T 80	V
		2SD667AT 100	
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current (DC)	I_C	1.0	A
Collector Current (Pulse)	I_{CP}	2.0	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	* 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}	$I_C=10\text{ A}$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $I_B=0$	80			V
			100			
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=100\text{V}$ $I_E=0$			10	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0\text{V}$ $I_C=150\text{mA}$	60		320	
	$h_{FE(2)}$	$V_{CE}=5.0\text{V}$ $I_C=500\text{mA}$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$			1.0	V
Base to Emitter Saturation Voltage	V_{BE}	$V_{CE}=5.0\text{V}$ $I_C=150\text{mA}$			1.5	V
Transition Frequency	f_T	$V_{CE}=5.0\text{V}$ $I_C=150\text{mA}$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		12		pF

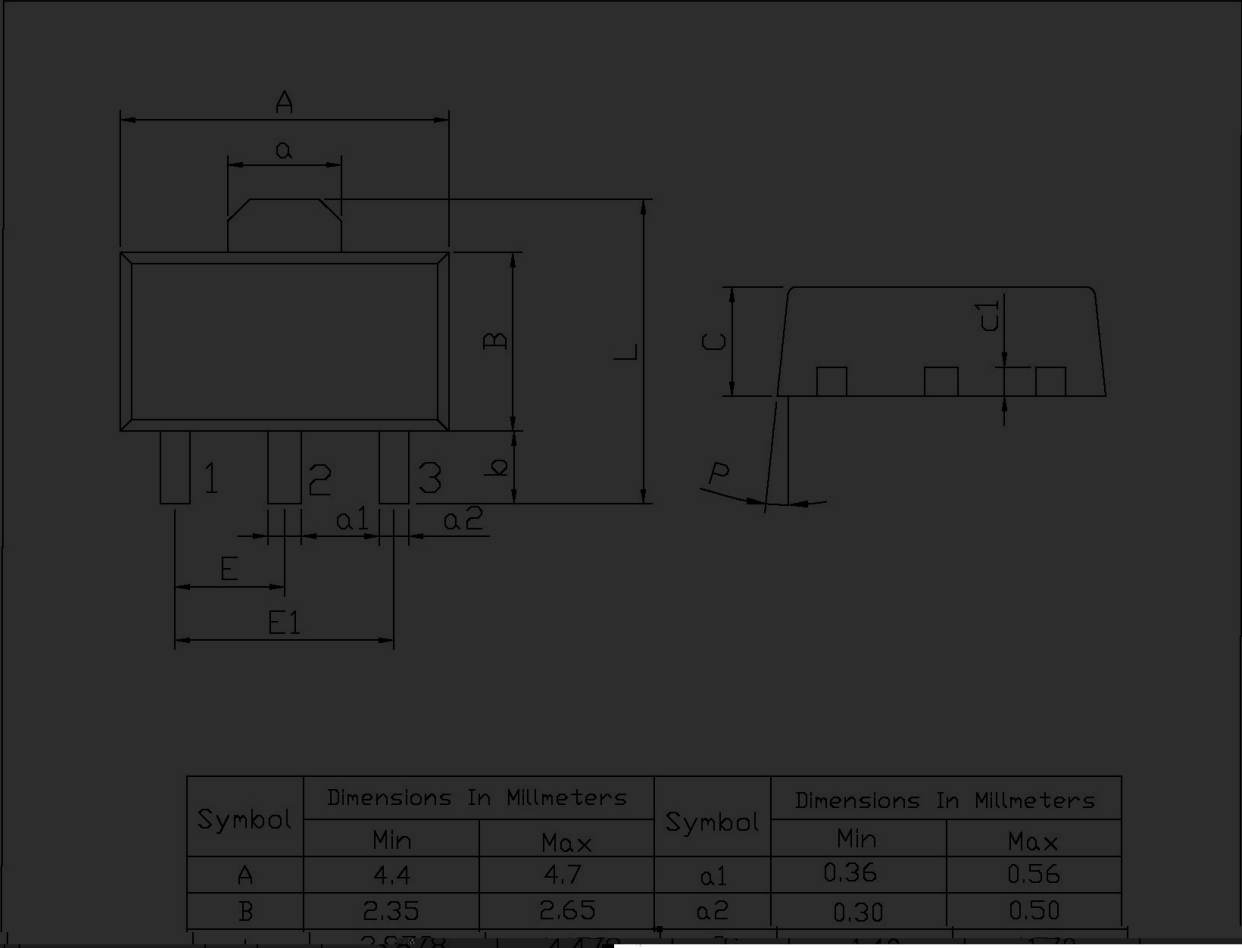
/ Electrical Characteristic Curve



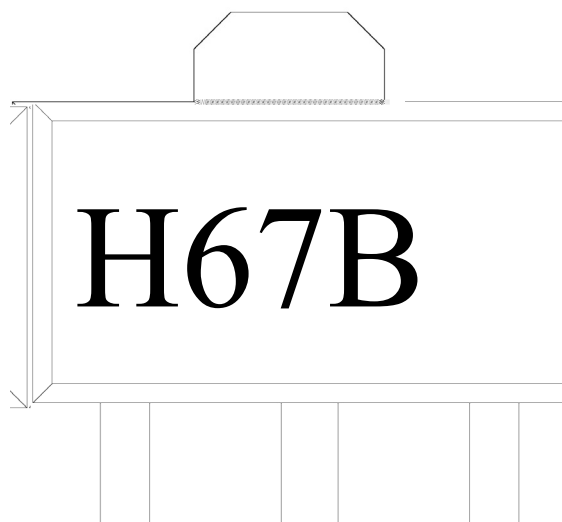
/ Package Dimensions

SOT-89

单位: mm



/ 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)