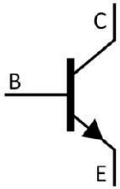


SOT-89 NPN Silicon NPN transistor in a SOT-89 Plastic Package.

h_{FE} 2SB798
Low $V_{CE(sat)}$, excellent h_{FE} linearity, complements the 2SB798.

Audio frequency power amplifier applications.

/ Equivalent Circuit



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

h_{FE}

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current-Continuous	I_C	1.0	A
Collector Current -Continuous(Pluse)	I_{CP}	1.5	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	* P_C	2.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*mounted on ceramic substrate(16cmm²×0.7mm)

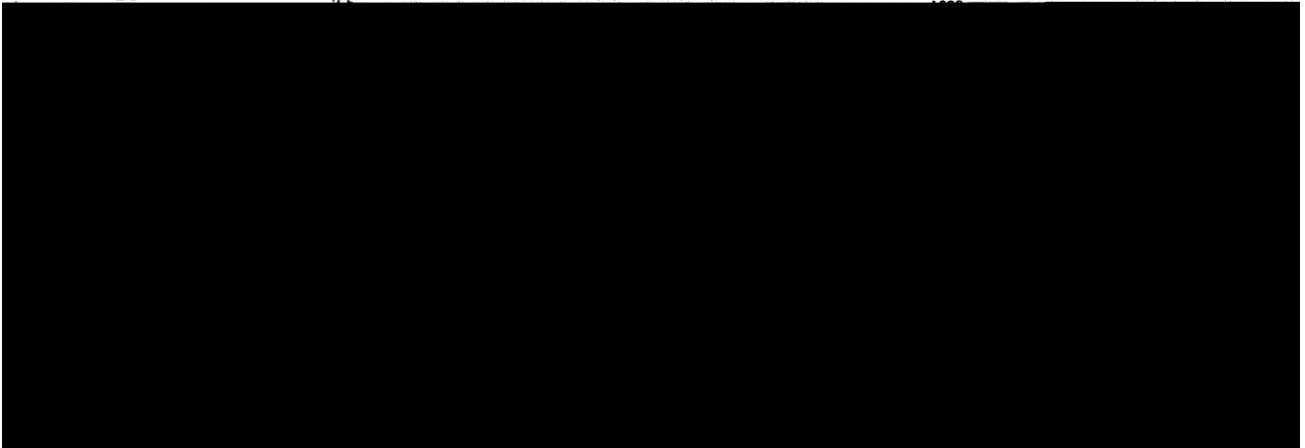
* 16cmm²×0.7mm

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=30V$ $I_E=0$			0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=100mA$	90	200	400	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=1.0A$	50	140		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.0A$ $I_B=100mA$		0.21	0.4	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1.0A$ $I_B=100mA$		1.0	1.2	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=6.0V$ $I_C=10mA$	600	630	700	mV
Transition Frequency	f_T	$V_{CE}=6.0V$ $I_C=10mA$		130		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6.0V$ $I_E=0$ $f=1.0MHz$		22		pF

/ Electrical Characteristic Curve

$P_c - T_a$

$I_C - V_{CE}$

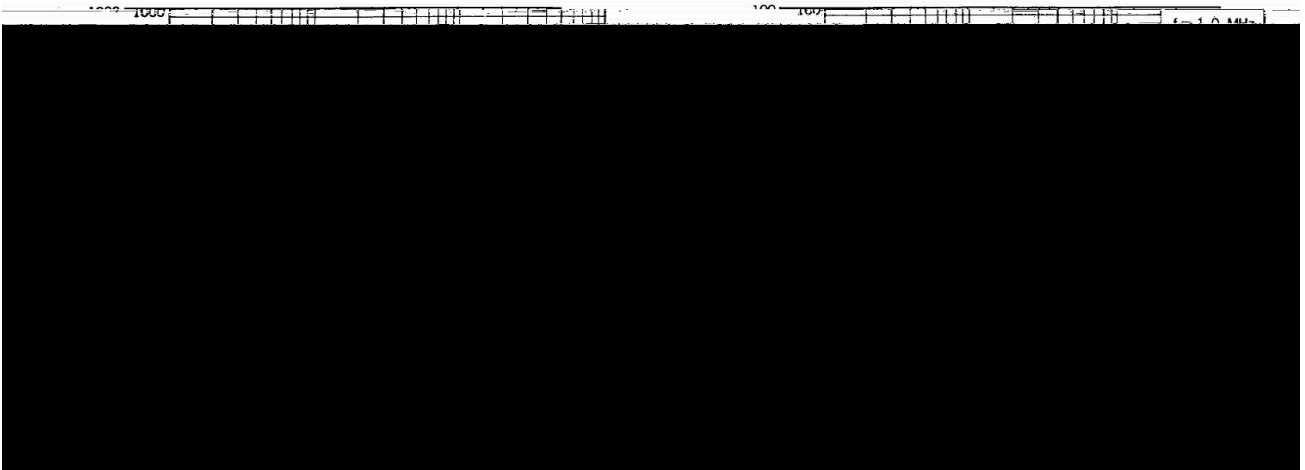


$V_{BE(sat)} - I_B$



$f_T - I_C$

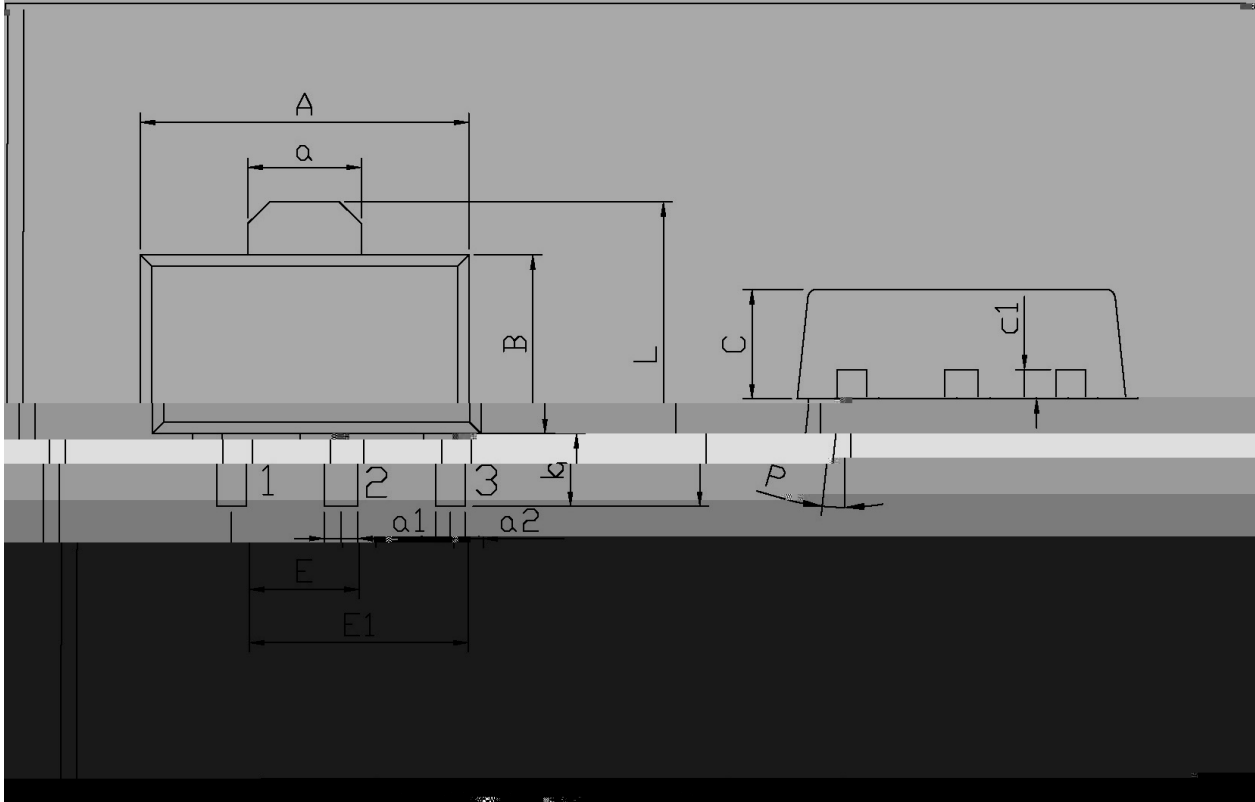
$C_{ob} - V_{CE}$



/ Package Dimensions

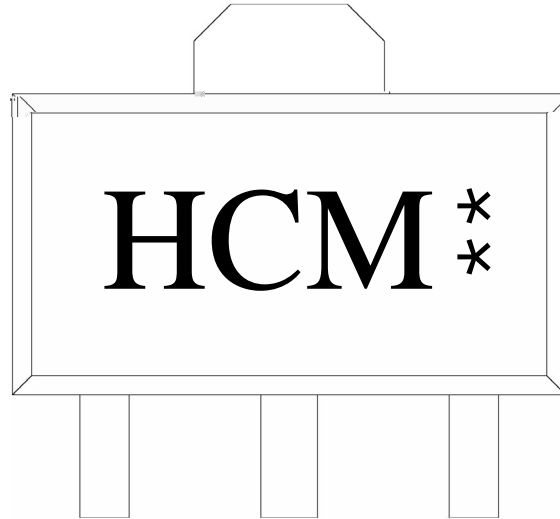
SOT-89

单位: mm



Symbol	Min	Max	Symbol	Min	Max
	A	4.4		4.7	a1
a	3.25	3.65	a2	0.29	0.53
L	3.878	4.478	C	1.40	1.70

/ Marking Instructions



H

C

M

h_{FE}

**

Note:

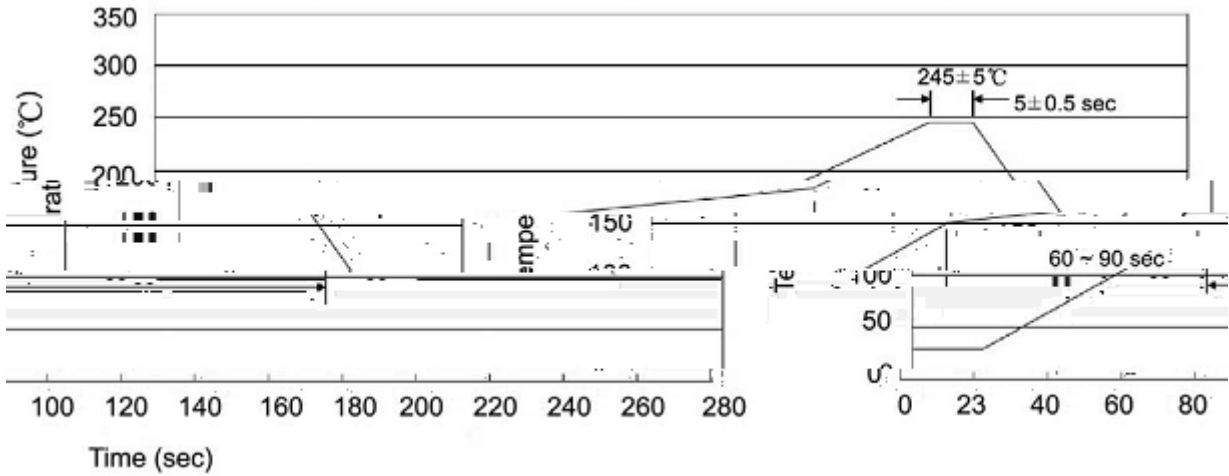
H: Company Code.

C: Product Type.

M h_{FE} Classifications Symbol

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

() / K\d g\iXk i\`Gif]`d`]fi @ `l \]fn`Jfd \i'e^ZGS=i\z



Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	8	56,000	7 ×12	180×120×180	385×257×392

/ Notices