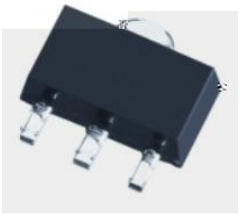
SOT-89 NPN Silicon NPN transistor in a SOT-89 Plastic Package.

, , 2SA1797

Low saturation voltage, excellent DC current gain characteristics, complements the 2SA1797.
HF product.

Low frequency power amplifier applications.



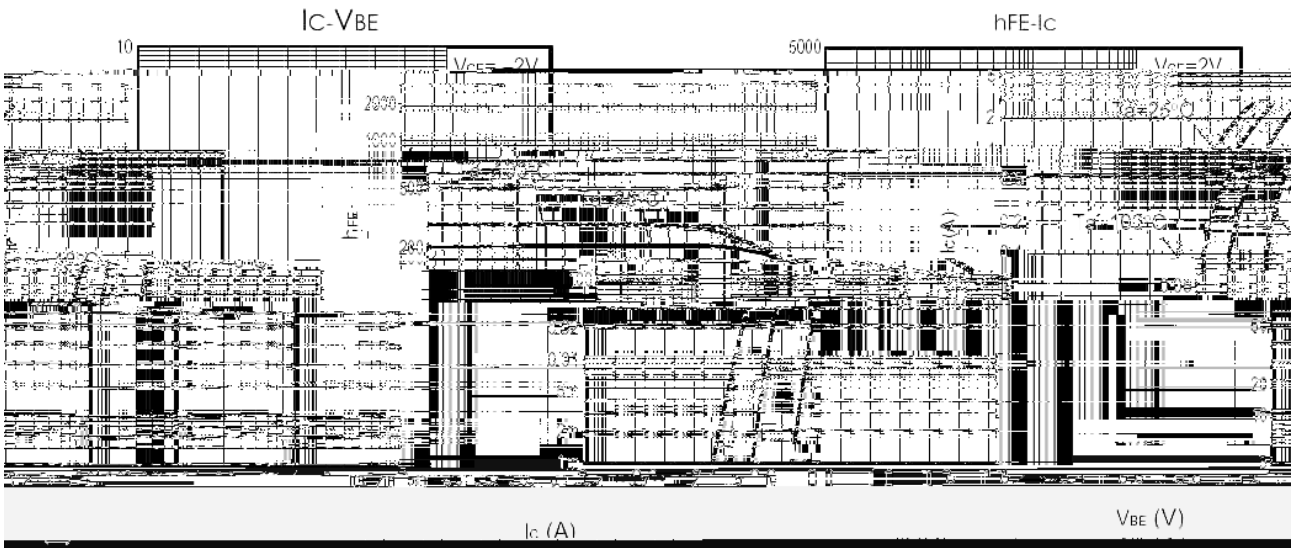
PIN1 Base PIN 2 Collector PIN 3 Emitter

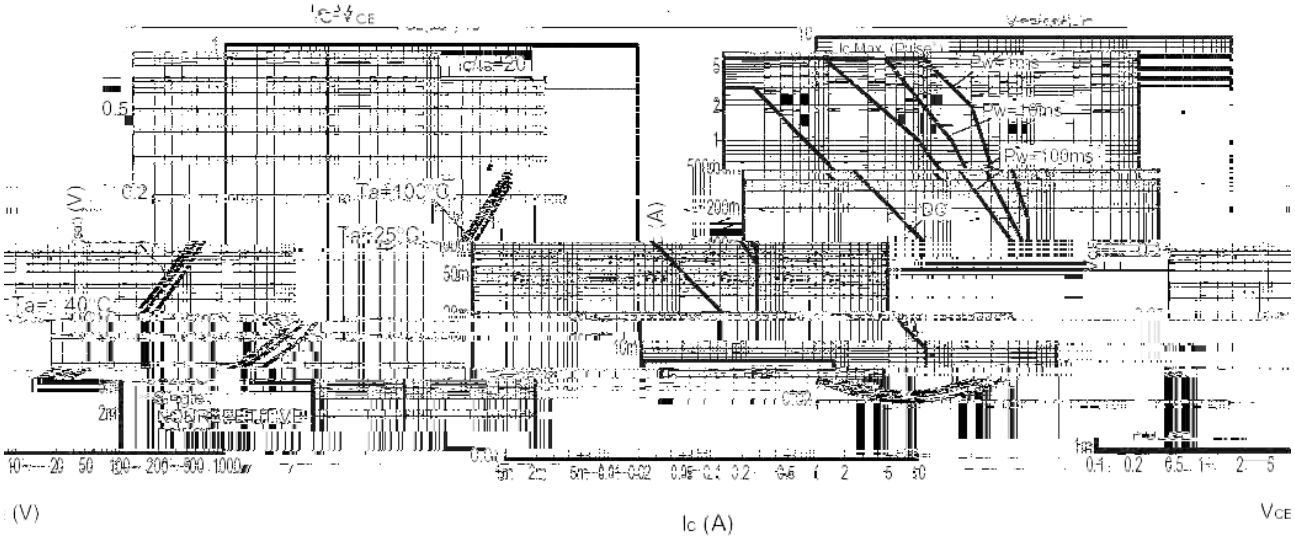
h_{FE} Classifications Symbol	P	Q
h_{FE} Range	82 180	120 270
Marking	HDKP	HDKQ

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Current – Continuous(Pulse)	I_{CP}	6.0	A
Collector Power Dissipation	P_C	0.5	W
Collector Power Dissipation*	$*P_C$	2.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

* 40×40×0.7

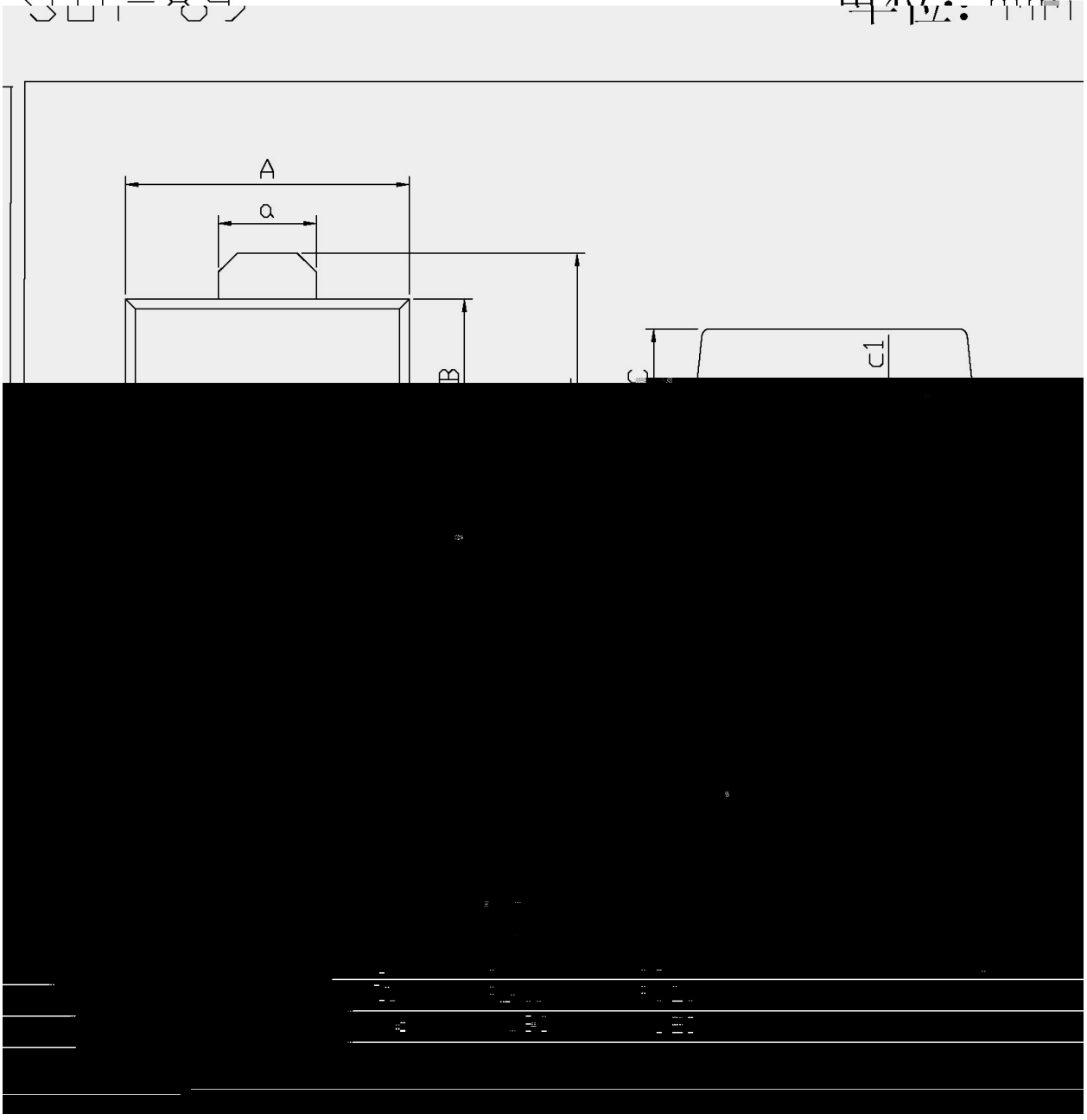
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=50μA	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=50μA	6.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V			0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=5.0V			0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=2.0V I_C=500mA	82		270	
	$h_{FE(2)}$	V_{CE}=2.0V I_C=1.5A	45			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=1.0A I_B=50mA		0.13	0.35	V
Transition Frequency	f_T	V_{CE}=2.0V I_C=0.5A f=100MHz		210		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V f=1.0MHz		25		pF

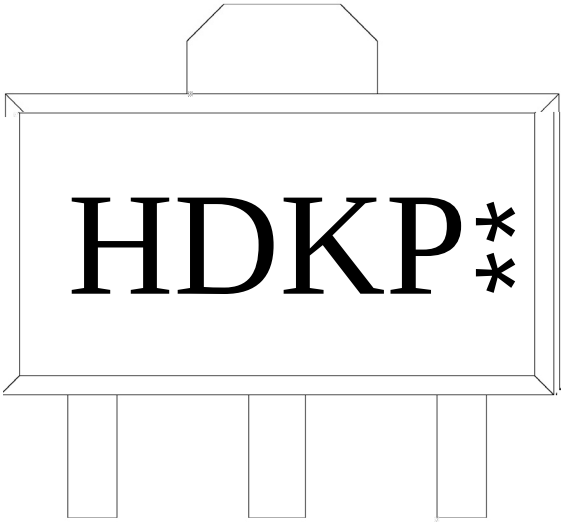

IC-VBE
hFE-IC
VCE=-2V
VCE=2V
Ta=25°C
Ic (A)
VBE (V)


Ta=100°C
Ta=25°C
Ta=-40°C
Pw=100ms
DC
Ic (A)
VCE

SOT-89

单位：mm





H

DK

P

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Note:

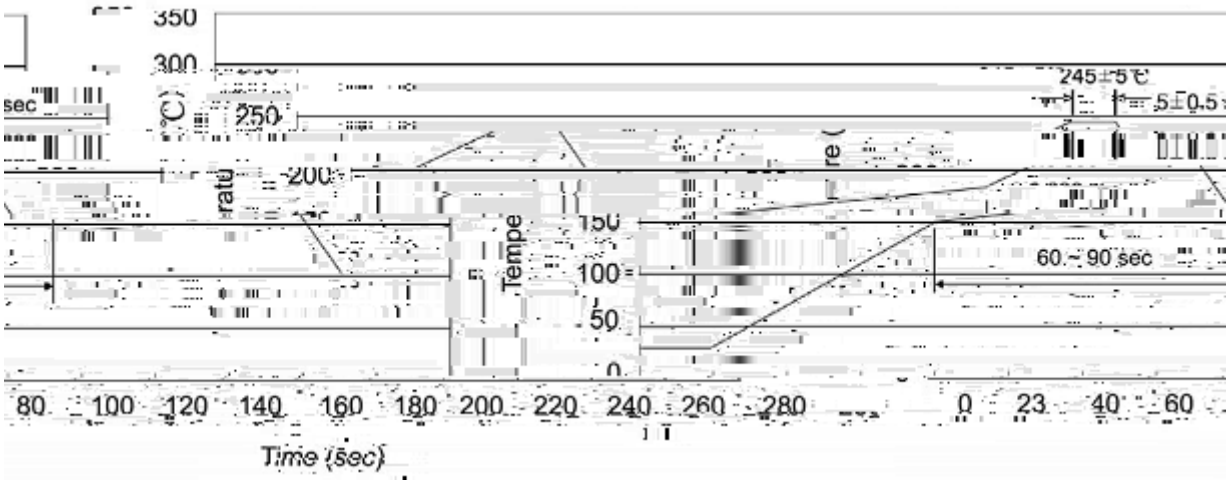
H: Company Code.

DK: Product Type.

P h_{FE} Classifications Symbol

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

Wh p shrdwxrh Prriioh irr IU Uhiorw Vroghriqj+Pe-Frhh,



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1 25 150 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

Note:

1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

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

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	8	56,000	7 ρ ×12	180×120×180	385×257×392