

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.



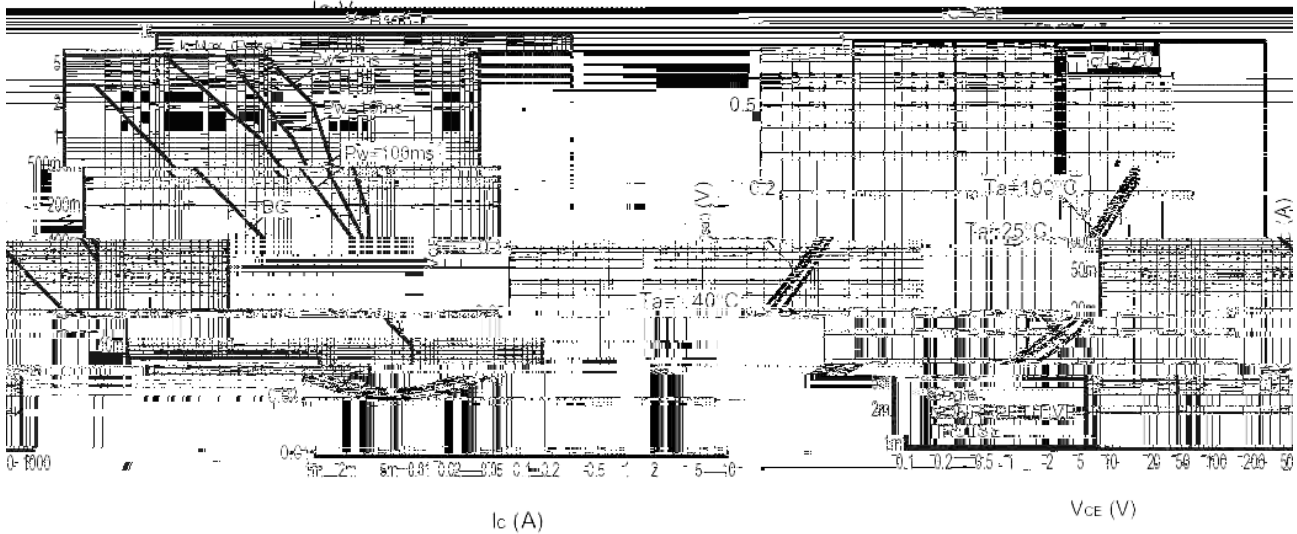
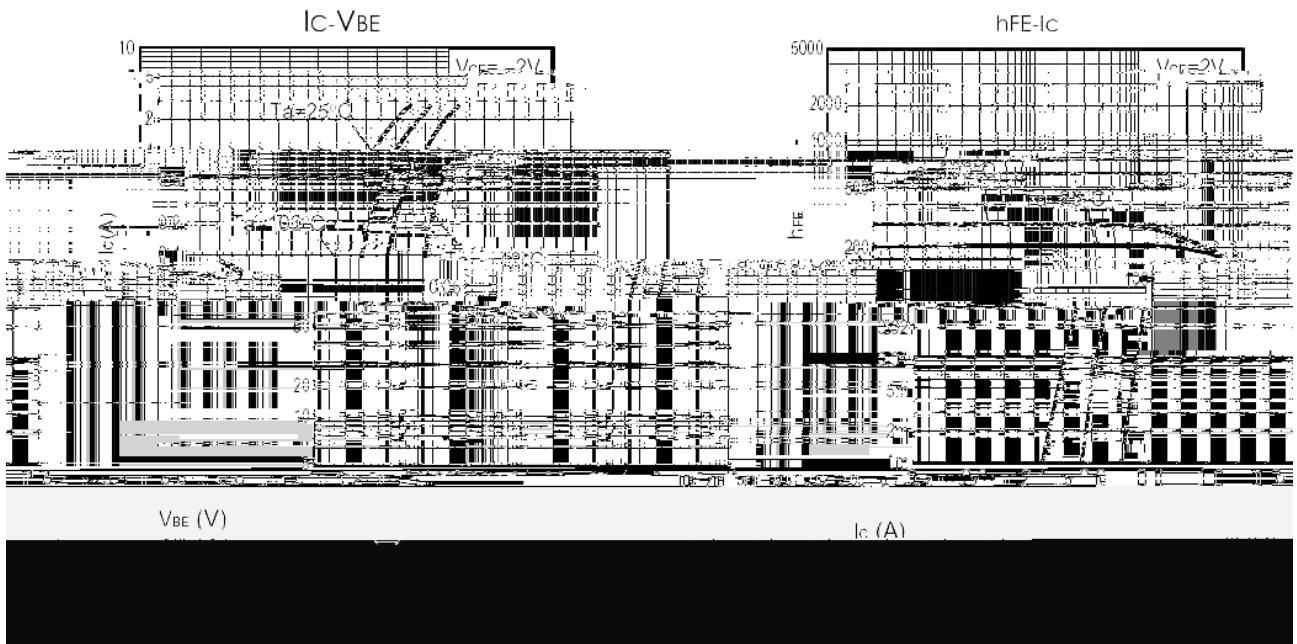
PIN1 Base          PIN 2 Collector          PIN 3 Emitter

$h_{FE}$ 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	

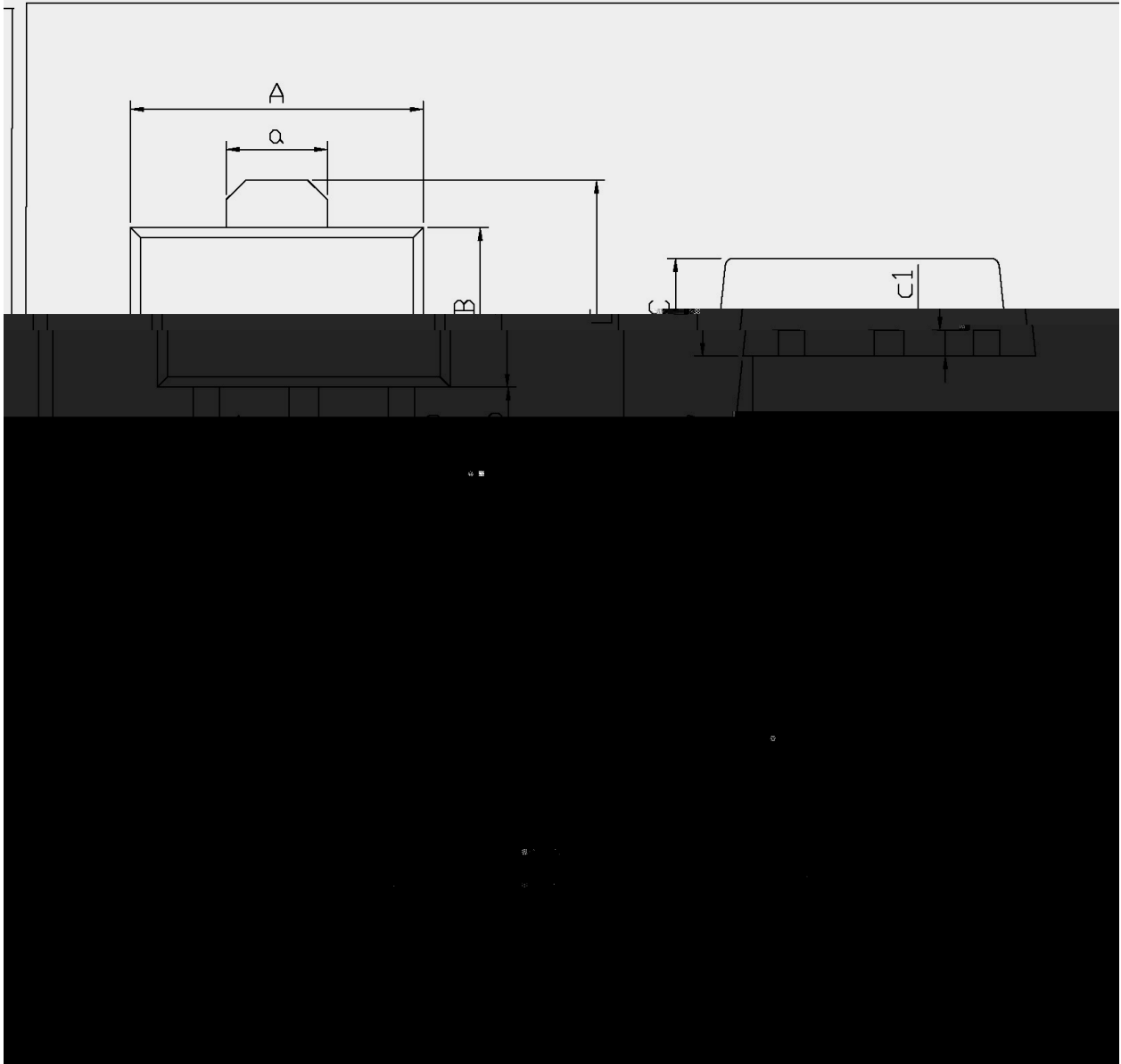
\* 40×40×0.7

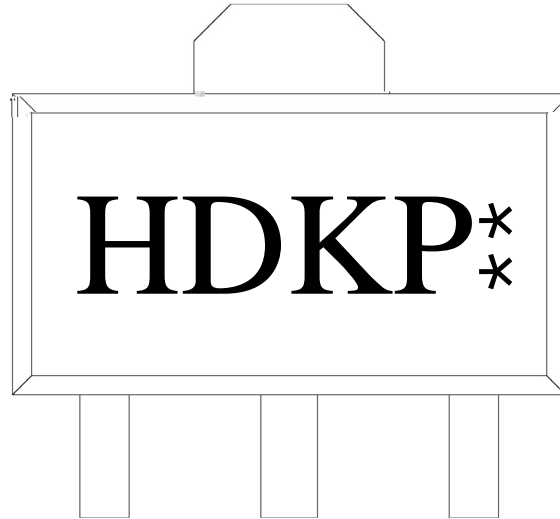
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=50\mu A$	60			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=1.0mA$	50			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=50\mu A$	6.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=60V$			0.1	$\mu A$
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{EB}=5.0V$			0.1	$\mu A$
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



50T1-89

单位: mm





H

DK

P

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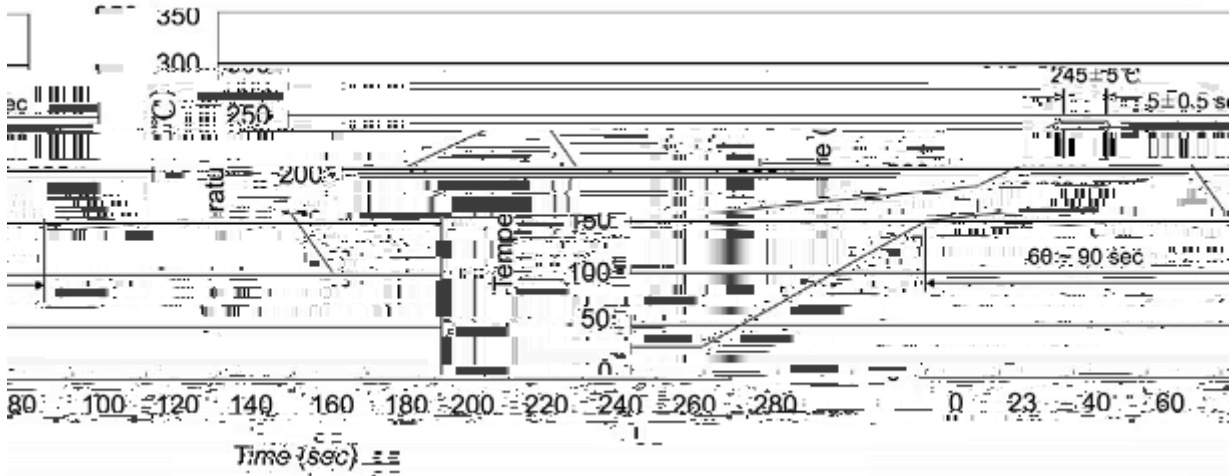
Note:

H: Company Code.

DK: Product Type.

P  $h_{FE}$  Classifications Symbol

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



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.            |

 $260 \pm 5$ 
<sup>a</sup>  $10 \pm 1$  sec.

 Temp.: $260 \pm 5$ 

 Time: $10 \pm 1$  sec

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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 ×12	180×120×180	385×257×392