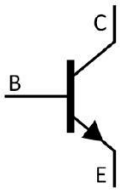


Silicon NPN transistor in a SOT-23 Plastic Package.

Large  $I_C$ , low  $V_{CE(sat)}$ , complementary pair with the 2SA1036K.

Medium power amplifier applications.



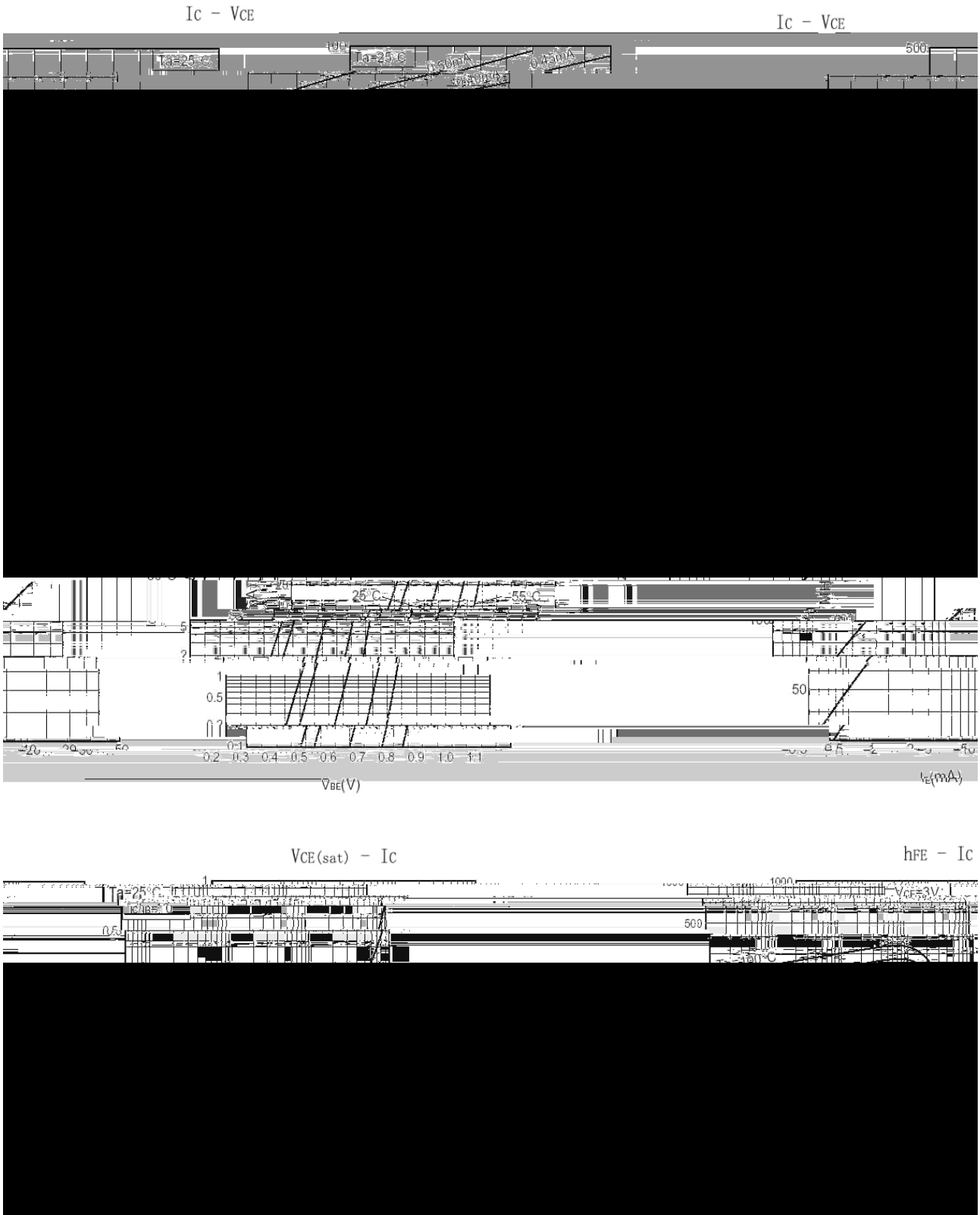
PIN 1 Base      PIN 2 Emitter      PIN 3 Collector

$h_{FE}$ Classifications Symbol	P	Q	R
$h_{FE}$ Range	82 180	120 270	180 390
Marking	HCP	HCQ	HCR

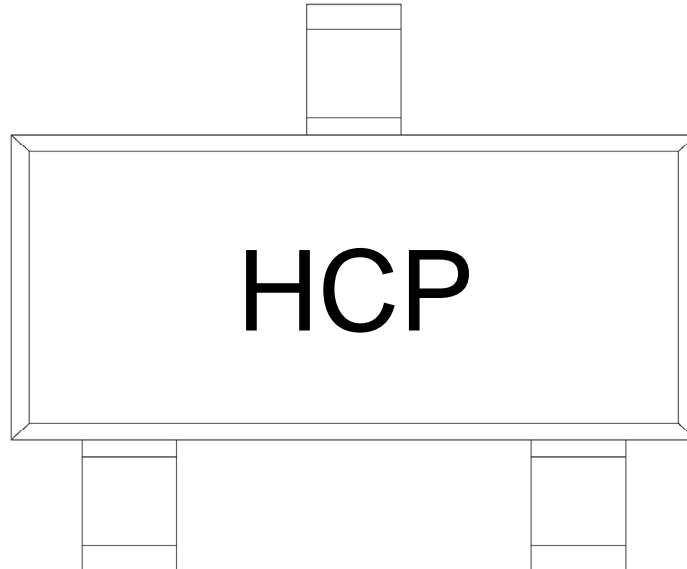
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	40	V
Collector to Emitter Voltage	$V_{CEO}$	32	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current	$I_C$	500	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- Base Breakdown Voltage	$V_{CBO}$	$I_C = 100 \text{ A}$	40			V
Collector-Emitter Breakdown Voltage	$V_{CEO}$	$I_C = 1.0 \text{ mA}$	32			V
Emitter-Base Breakdown Voltage	$V_{EBO}$	$I_E = 100 \text{ A}$	5.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = 20 \text{ V}$			1.0	A
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{EB} = 4.0 \text{ V}$			1.0	A
DC Current Gain	$h_{FE}$	$V_{CE} = 3.0 \text{ V}$ $I_C = 10 \text{ mA}$	82		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}$ $I_B = 1.0 \text{ mA}$			0.4	V

Tf57.0 10.5 268.02 358.2803 Tm0 Tc(V)Tj7.02 0 0 7.02 275.04 356.7803.0031 Tw(T)31m-0.06(f1 Tw[TH.5 57.66 29







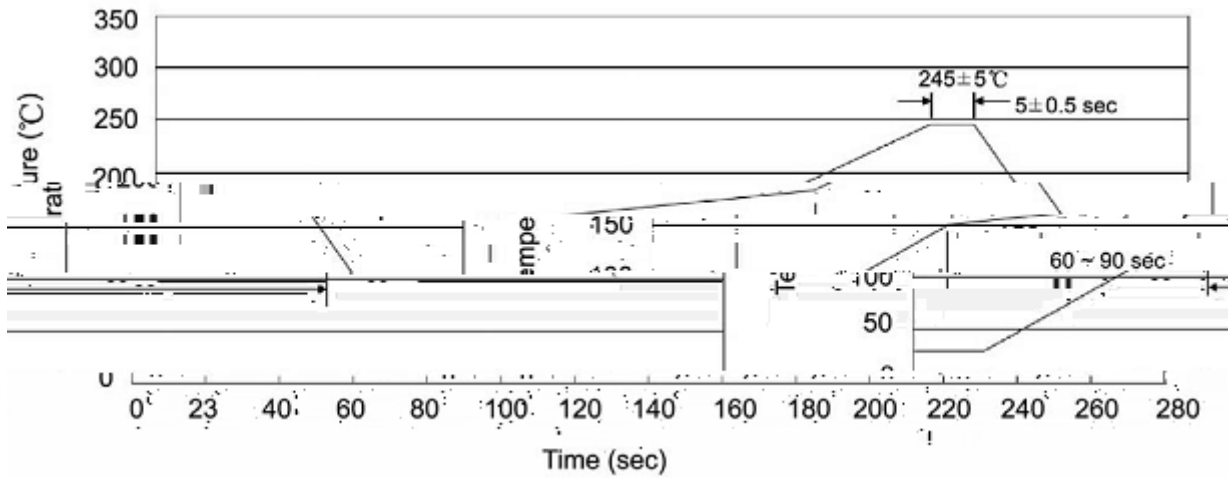
$h_{FE}$

Note:

Company Code

Product Type Code

$h_{FE}$  Classifications Symbol Code



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

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205