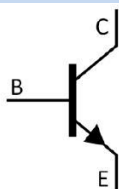


SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

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

Medium power amplifier applications.

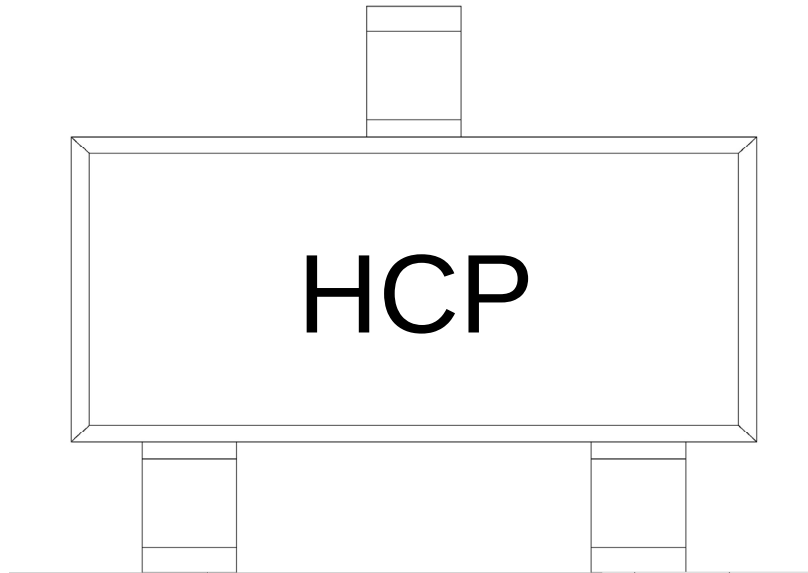


PIN1 Base PIN 2 Emitter PIN 3 Collector

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	°C
Storage Temperature Range	T_{stg}	-55 150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- Base Breakdown Voltage	V_{CBO}	$I_C = 100\mu A$	40			V
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C = 1.0mA$	32			V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E = 100\mu A$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 20V$			1.0	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB} = 4.0V$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = 3.0V$ $I_C = 10mA$	82		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA$ $I_B = 1.0mA$			0.4	V
Transition Frequency	f_T	$V_{CE} = 5.0V$ $f = 100MHz$ $I_E = -20mA$		250		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V$ $f = 1.0MHz$ $I_E = 0$		6.0		pF



H

C

P

h_{FE}

Note:

H

Company Code

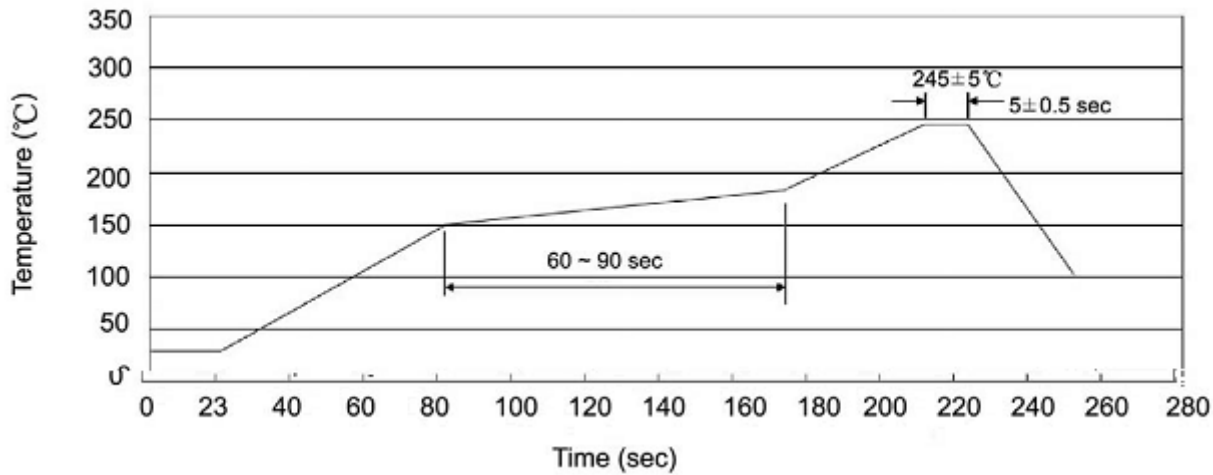
C

Product Type Code

P

h_{FE} Classifications Symbol Code

Temperature Profile for IR Reflow Soldering(Pb-Free)



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

/ 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-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205