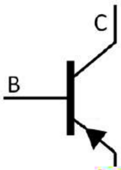
Silicon PNP transistor in a TO-252 Plastic Package.

Low $V_{CE(sat)}$,excellent DC current gain characteristics, complements the 2SD2118.

Medium power amplifier applications.



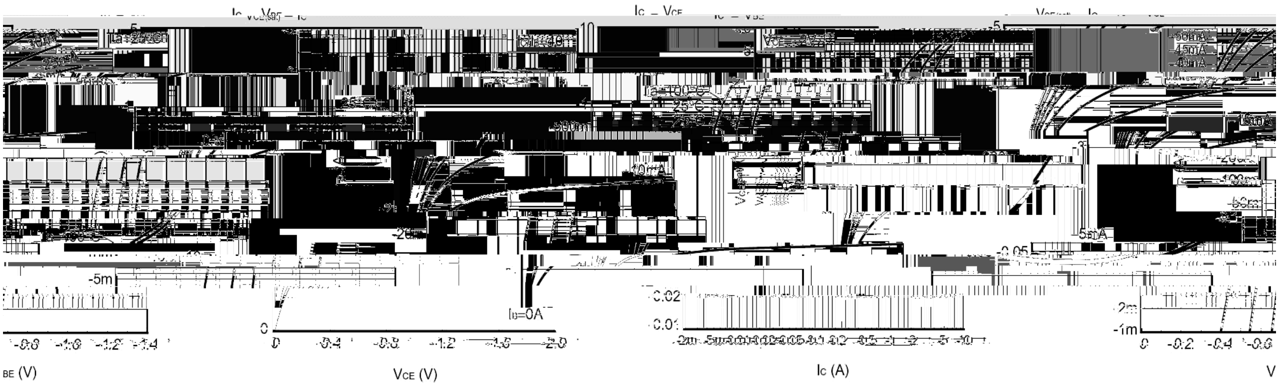
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

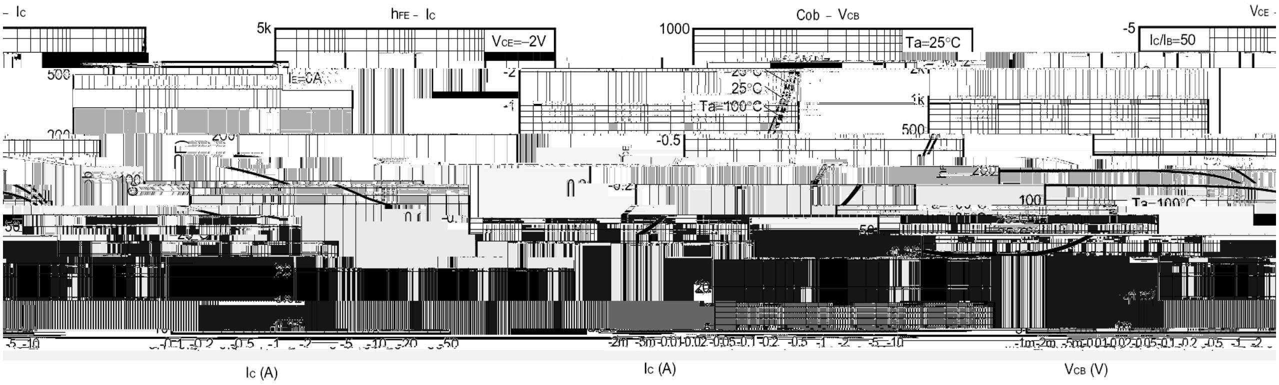
| $h_{FE}$ Classifications Symbol | P | Q | R |
|---|---|---|---|
| $h_{FE}$ Range | 82 180 | 120 270 | 180 390 |

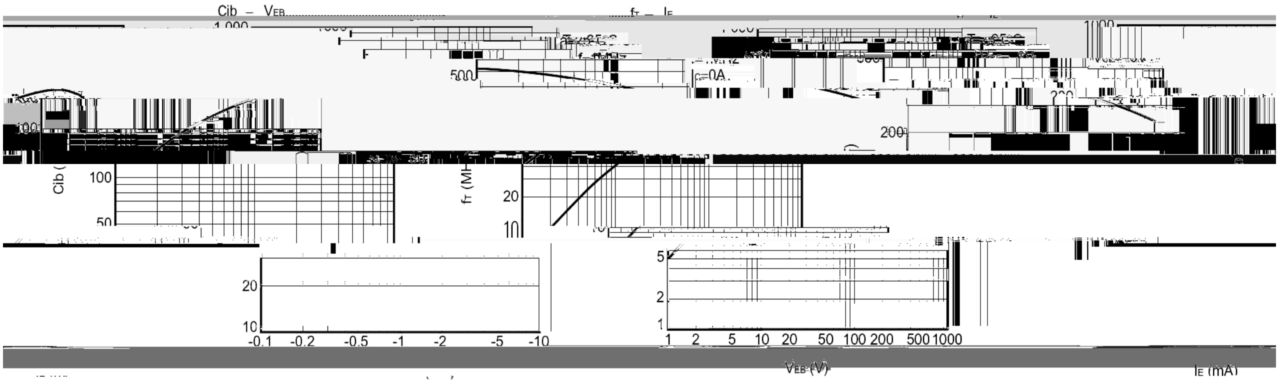
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -30 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -20 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -6.0 | V |
| Collector Current - Continuous | $I_C$ | -5 | A |
| Peak Collector Current – Continuous | $I_{CM}$ | -10 | A |
| Collector Power Dissipation | $P_C$ | 1.0 | W |
| Collector Power Dissipation* | *$P_C$(Tc=25 ) | 10 | W |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

*mounted On40×40×0.7mm ceramic board.

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to Base Breakdown Voltage | $V_{CBO}$ | $I_C$=-50μA $I_E$=0 | -30 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=-1.0mA $I_B$=0 | -20 | | | V |

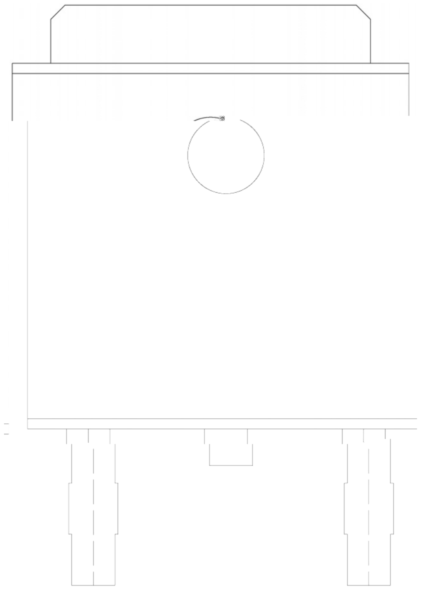

Ic – VCE
Ta=25°C
Ta=100°C
25°C
-10mA
-5m
IB=0A
0
-0.4
-0.8
-1.2
-1.6
-2.0
-0.8
-1.0
-1.2
-1.4
-0.02
-0.01
-0.05
-2m
-1m
0
-0.2
-0.4
-0.6
500uA
450uA
5mA
-200
-100m
-50m
BE (V)
VCE (V)
IC (A)
V


hFE - IC
5k
VCE=-2V
IE=0A
500
200
100
50
Cob - VCB
1000
Ta=25°C
25°C
Ta=100°C
-2
-1
-0.5
VCE
-5
IC/IB=50
2k
1k
500
200
100
Ta=100°C
50
20
IC (A)
IC (A)
VCB (V)


Cib – VEB
fT – IE
1000
500
Ta=25°C
IC=0A
200
100
Cib (
fT (MH
100
50
20
10
20
10
-0.1
-0.2
-0.5
-1
-2
-5
-10
5
2
1
1
2
5
10
20
50
100
200
500
1000
VEB (V)
IE (mA)

0.90 | b | 0.45 | 0.75 | L3 | 0.60

TO-252



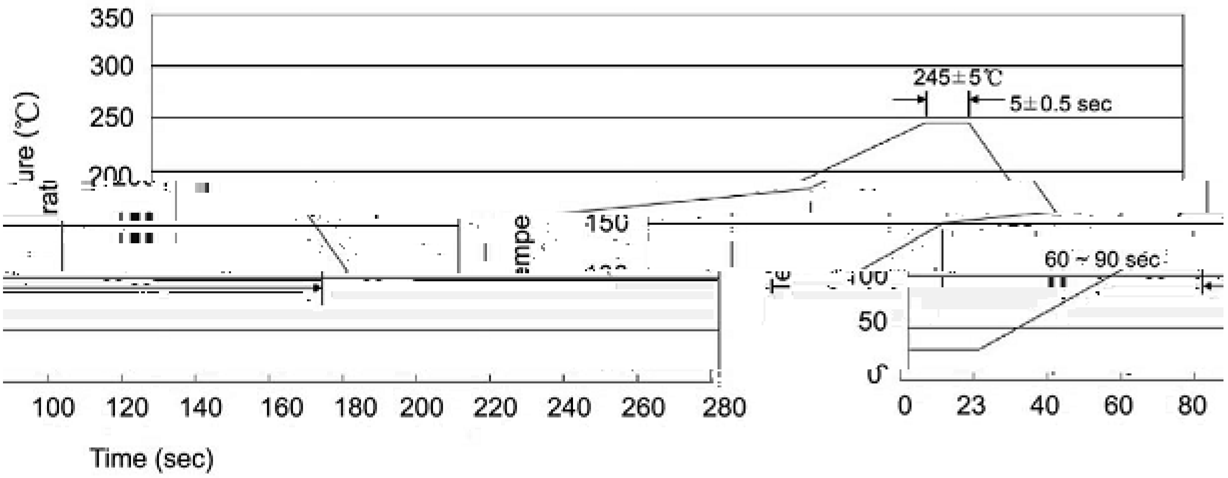
BR

$h_{FE}$

Note:

BR: Company C (j-e)/AAking 174D( [P:4.32737 2D0 Tc0 41e04b80556)Tj0941 Tj/TTD( T4

## 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<br>/ | Reels/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Reel | Inner Box | Outer Box |
| TO-252 | 2,500 | 2 | 5,000 | 5 | 25,000 | 13 ×16 | | |