

/ Descriptions

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

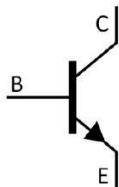
/ Features

Small reverse transfer capacitance, low noise figure.

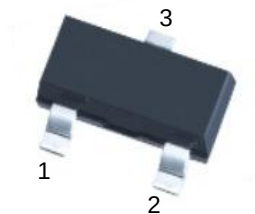
/ Applications

High frequency low noise amplifier.

/ Equivalent Circuit



/ Pinning



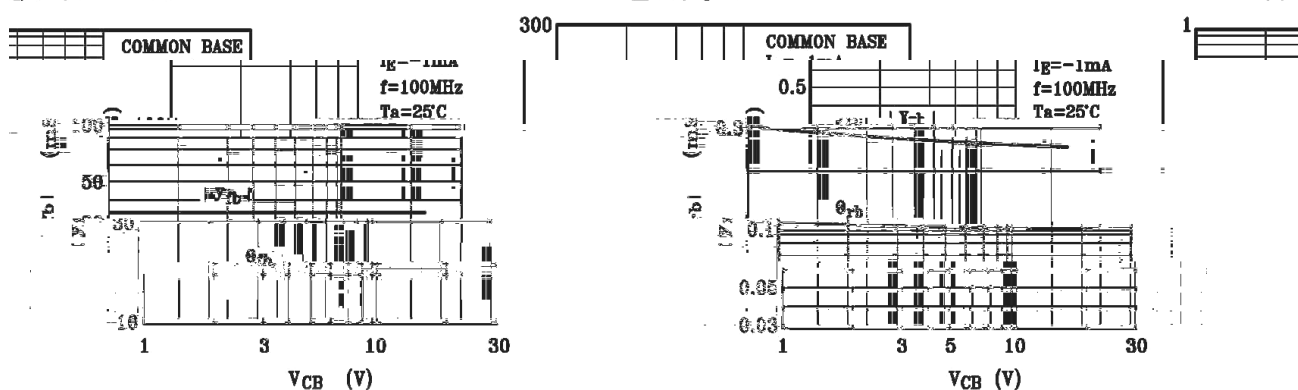
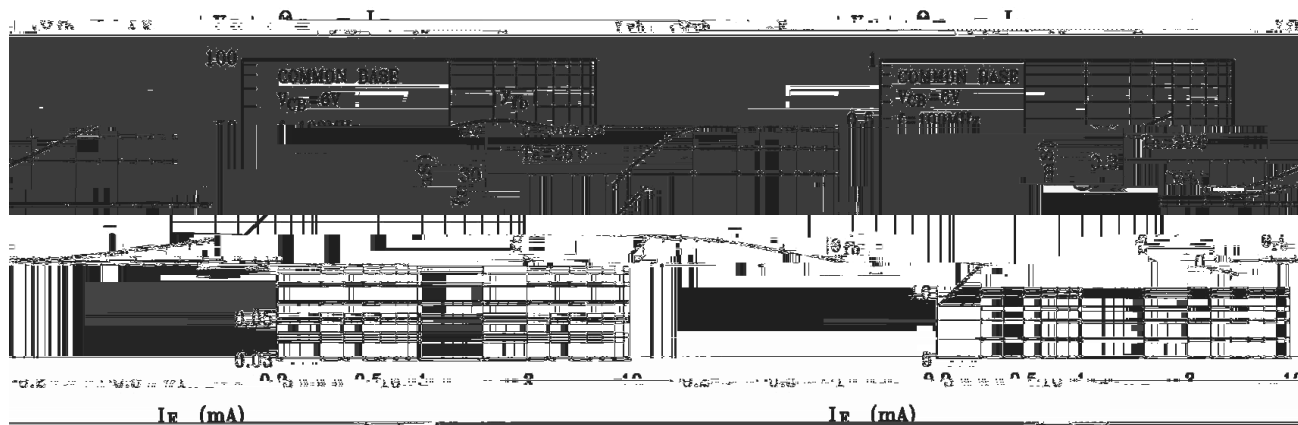
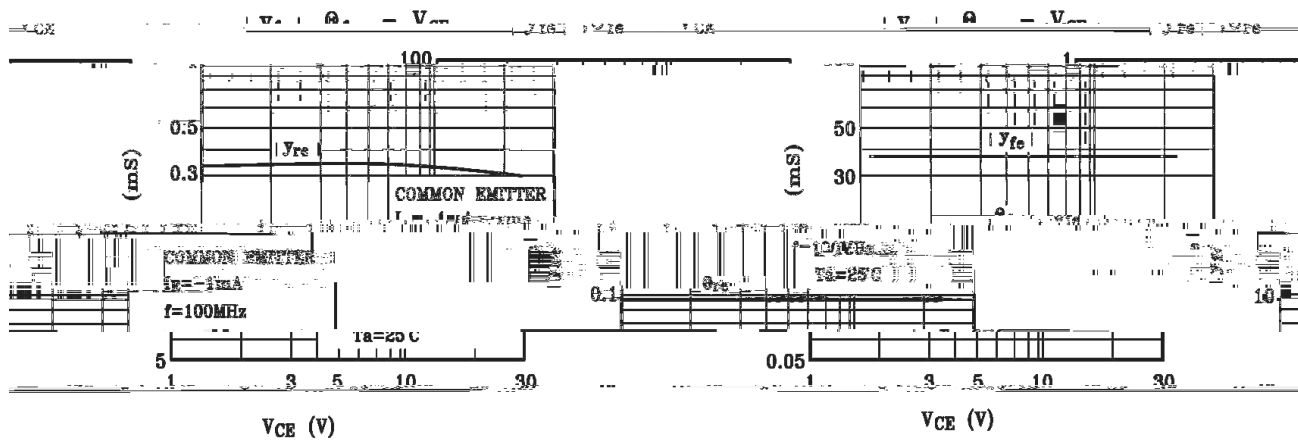
PIN 1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	40 80	70 140	100 200
Marking	HAQR	HAQO	HAQY

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	20	mA
Emitter Current	I_E	-20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j		

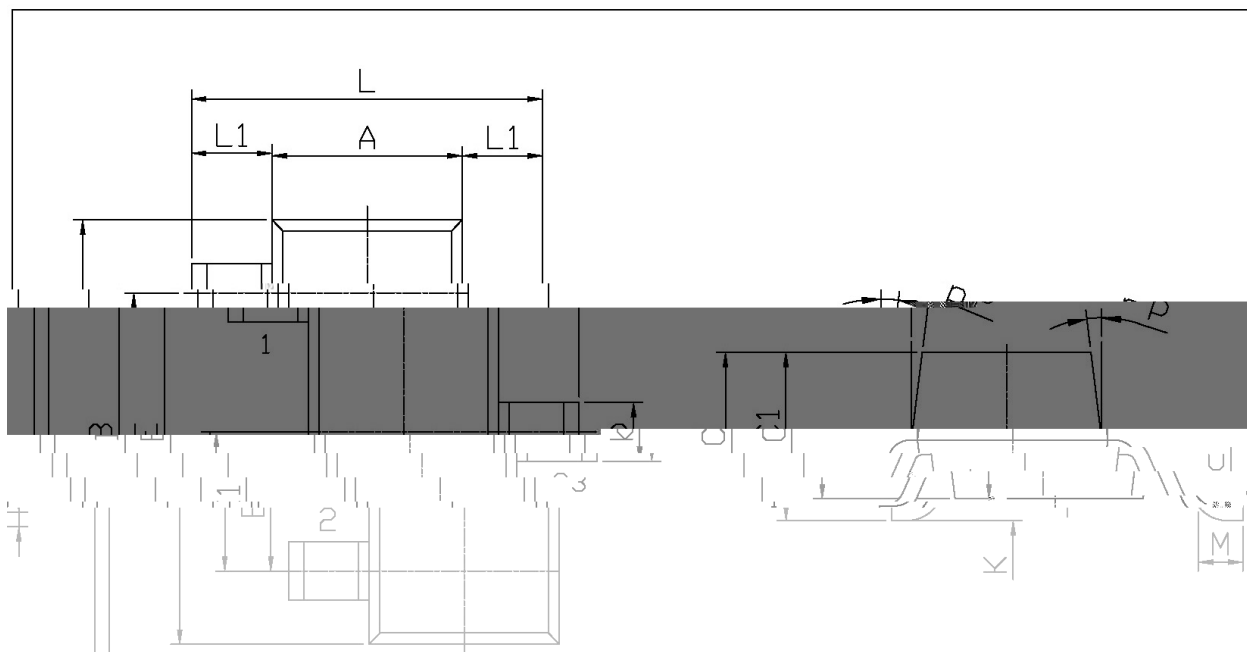
/ Electrical Characteristic Curve



/ Package Dimensions

SOT-23

单位; mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	φ	0.05	0.20
B	2.70	3.10	M	0.20MIN	
E	1.70	2.10	φ	7°	
E1	0.85	1.05			
b	0.35	0.55			

/ Marking Instructions



H

AQ

R h_{FE}

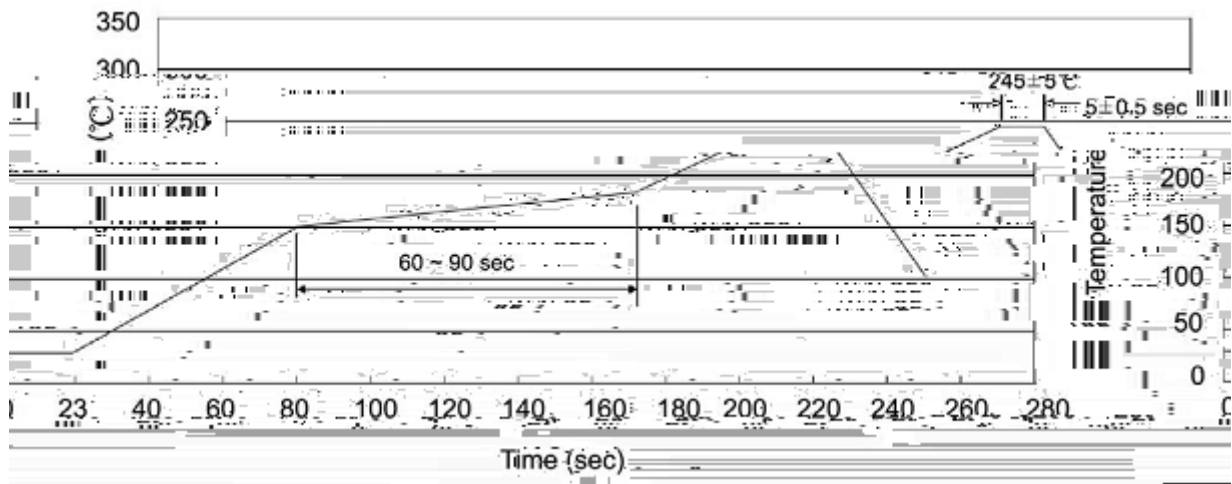
Note:

H Company Code

AQ Product Type

R h_{FE} Classifications Symbol

() / 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. |

/ Resistance to Soldering Heat Test Conditions

260±5 5 9 r 52 ±