

/ Descriptions

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

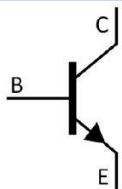
/ Features

2SB709A
Complementary pair with 2SB709A.

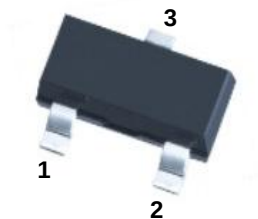
/ Applications

General power amplifier applications

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	160-260	210-340	290-460
Marking	H1ZQ	H1ZR	H1ZS

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}	7.0	V
Collector Current	I_C	100	mA
Collector Current	I_{CP}	200	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

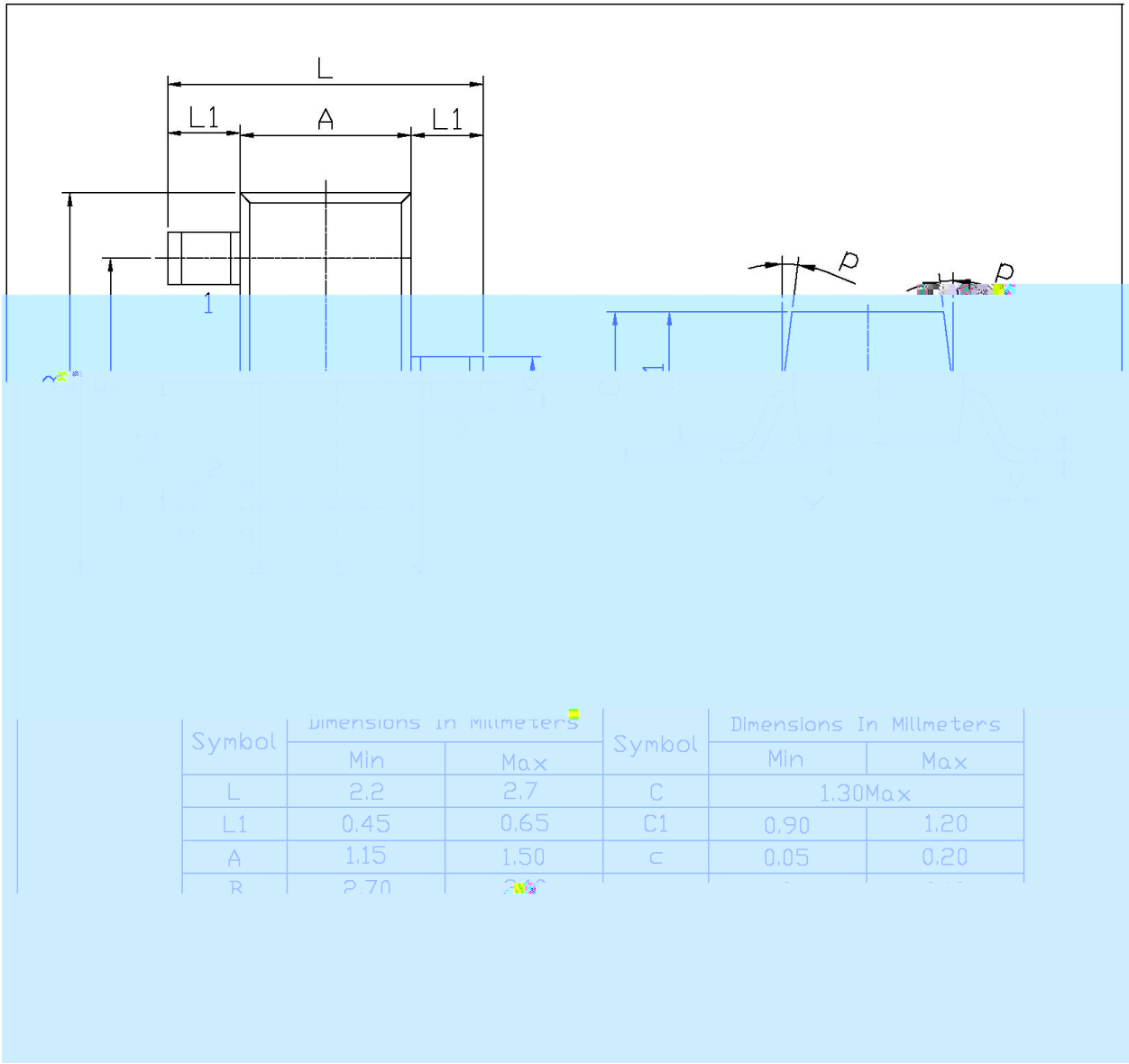
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20V$ $I_E=0$			0.1	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{CE}=10V$ $I_B=0$			100	A
Collector-Base Breakdown Voltage	V_{CBO}	$I_C=10$				

/ Electrical Characteristic Curve

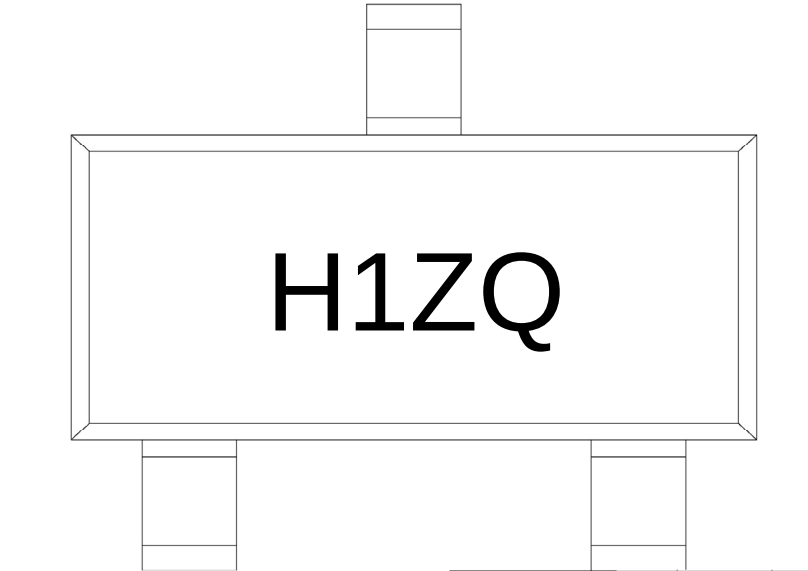
/ Package Dimensions

SOT-23

单位; mm



/ Marking Instructions



H

1Z

Q: h_{FE}

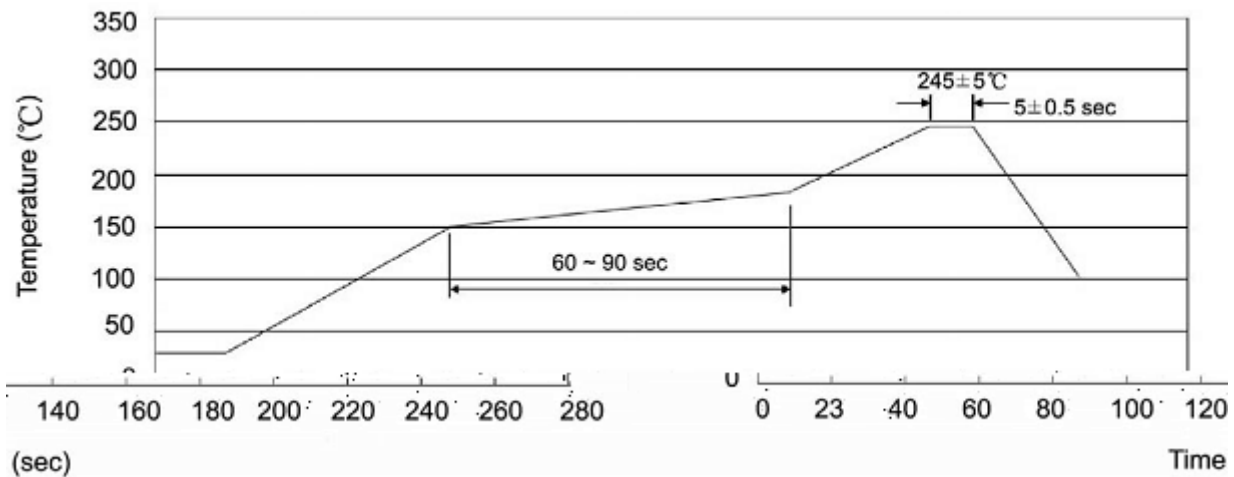
Note:

H: Company Code

1Z: Product Type Code

Q: 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. |

/ **Resistance to Soldering Heat Test Conditions**

260±5 10±1 sec. Temp.:260±5℃ Time:10±1 sec

/ **Packaging SPEC.**

/ REEL

Package Type	Units	Dimension	(unit mm ³)
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