

/ Descriptions

SOT-223 QSQ Silicon NPN transistor in a SOT-223 Plastic Package.

/ Features

$Y_{CE(sdt)}$ / k_{FE}

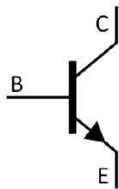
Low saturation voltage, excellent h_{FE} linearity and high h_{FE} .

/ Applications

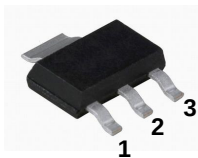
3 / /

Output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver .

/ Equivalent Circuit



/ Pinning



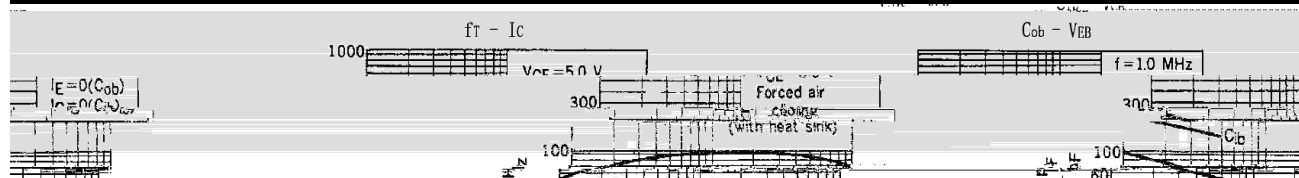
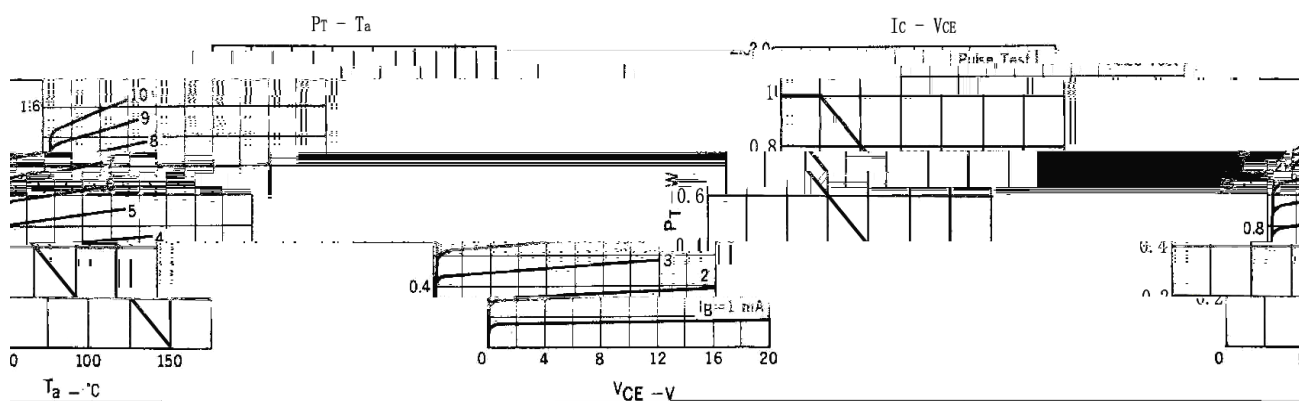
PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	Q	P	E
h_{FE} Range	60~120	100~200	160~320	200~400

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_{EB0}	5.0	V
Collector Current - Continuous	I_C	3.0	A

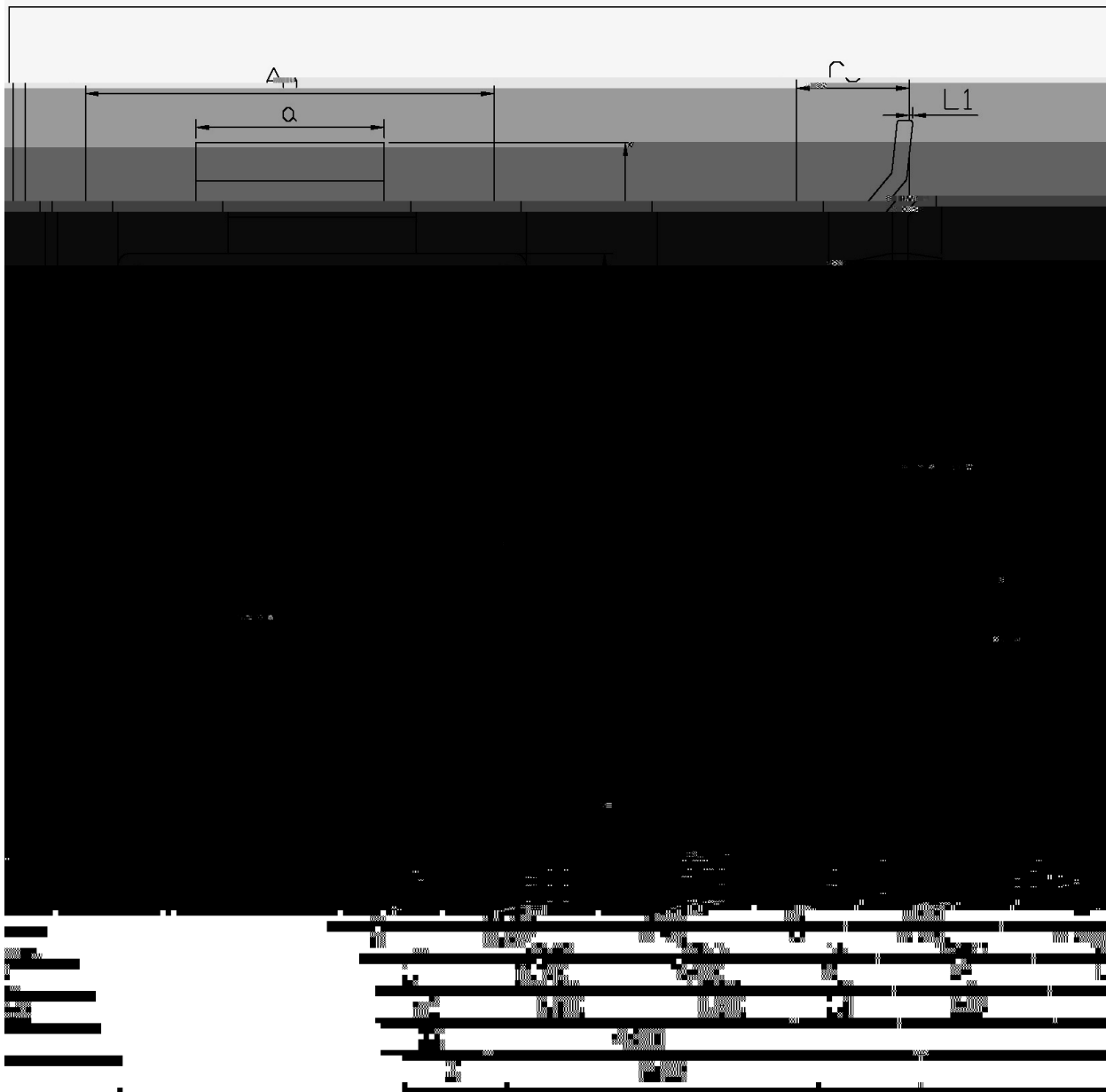
/ Electrical Characteristic Curve



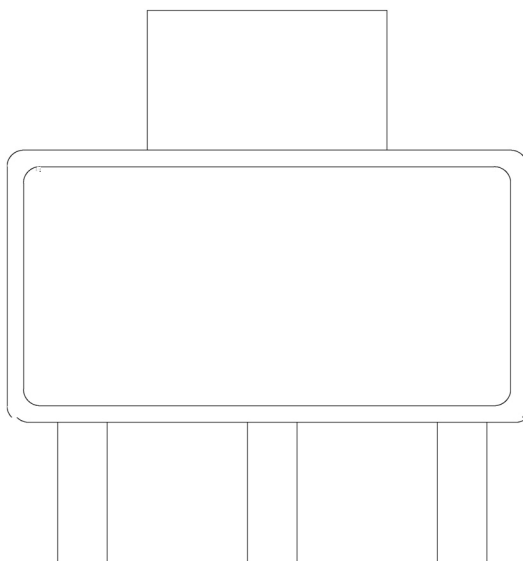
/ Package Dimensions

SOT-223

单位: mm



/ Marking Instructions



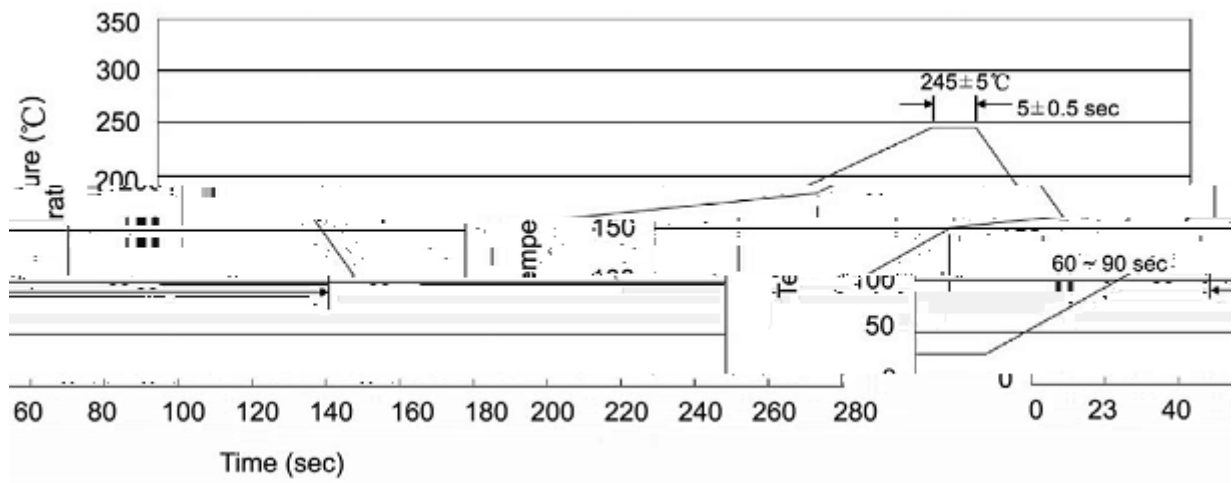
BU

D;;2Q

S

k_{FE}

() / 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
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