

/ Descriptions

TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

/ Features

High h_{FE} , low $V_{CE(sat)}$.

/ Applications

General purpose amplifier.

/ Equivalent Circuit



/ Pinning



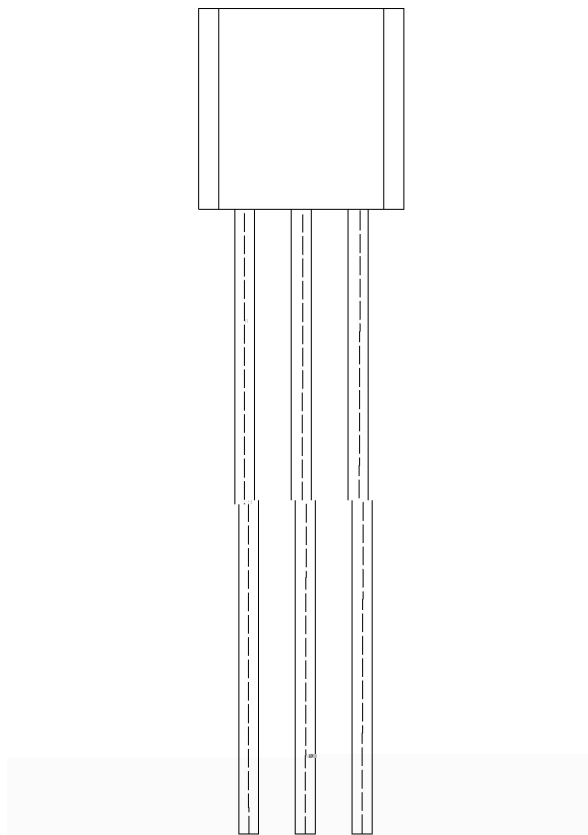
PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

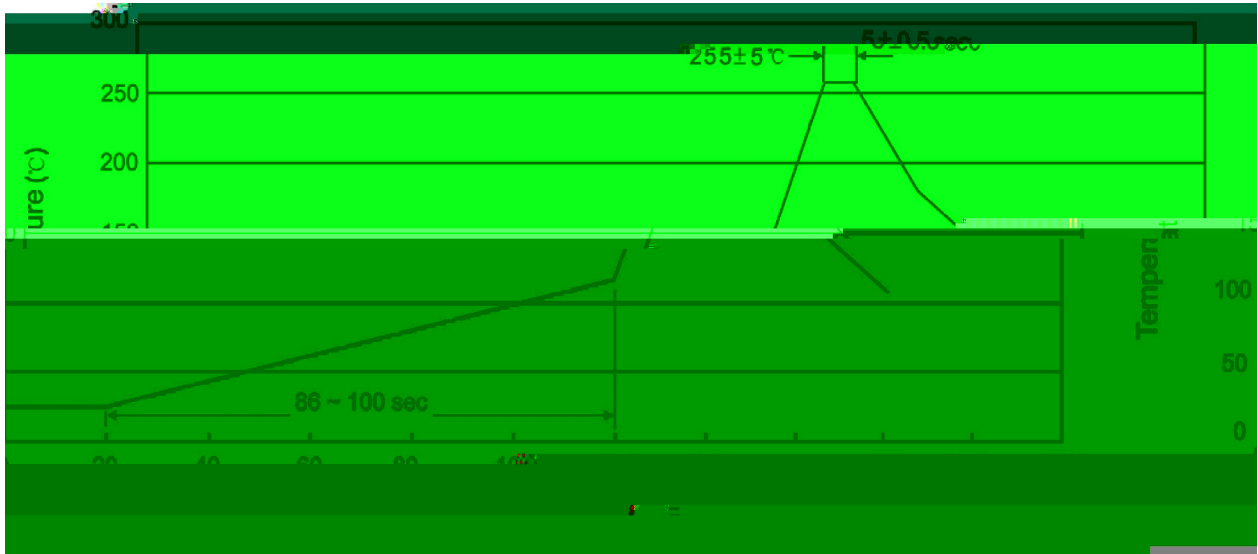
h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	160~260	200~340	290~460

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 - Continuous	I_C	100	mA
Collector Current – Continuous(Pulse)	I_{CP}	200	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter Symbol Test Conditions Min



() / Temperature Profile for Dip Soldering(Pb-Free)



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|---|-------|-----|-----------|--------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | Note: | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. | |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units	Dimension	(unit mm3)
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