
/ Descriptions

Silicon NPN transistor in a TO-252 Plastic Package.

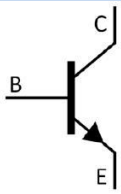
/ Features

Qualified to AEC-Q101 Standards for High Reliability, HF Product.

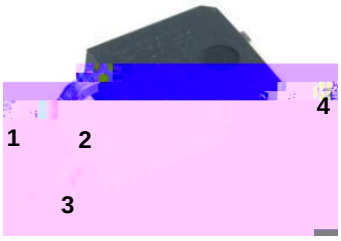
/ Applications

Relay drivers,high-speed inverters,converters,and other general high-current switching applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2,4 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

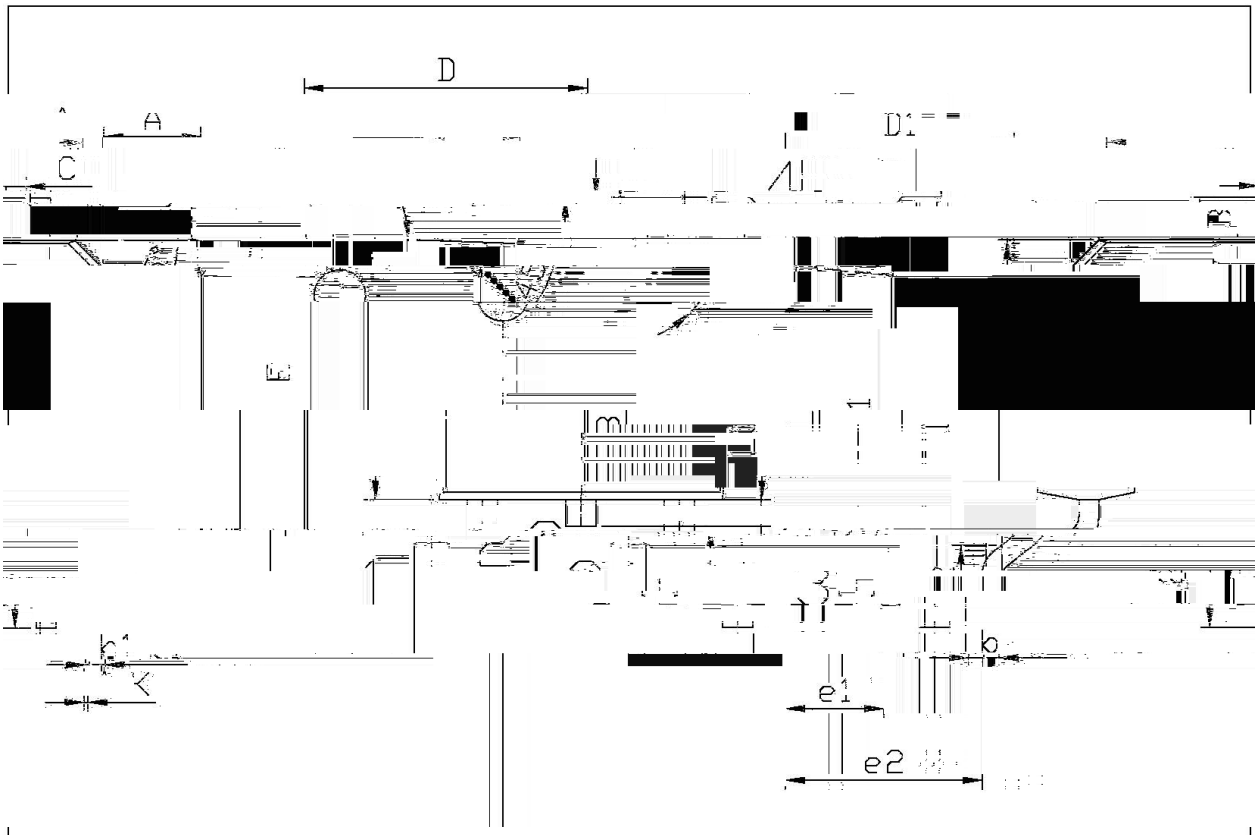
h_{FE} Classifications Symbol	Q	R	S	T
h_{FE} Range	70-140	100-200	140-280	200-400

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current - Continuous I	I_C	3	A
Collector Current – Continuous(Pulse)	I_{CP}	6	A
Collector Power Dissipation	P_C	1	W
Collector Power Dissipation	P_C(Tc=25℃)	10	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=10uA I_E=0	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1mA I_B=0	100			V
Emitter to Base Breakdown Voltage	V_{EBO}	I				

A

/ Package Dimensions

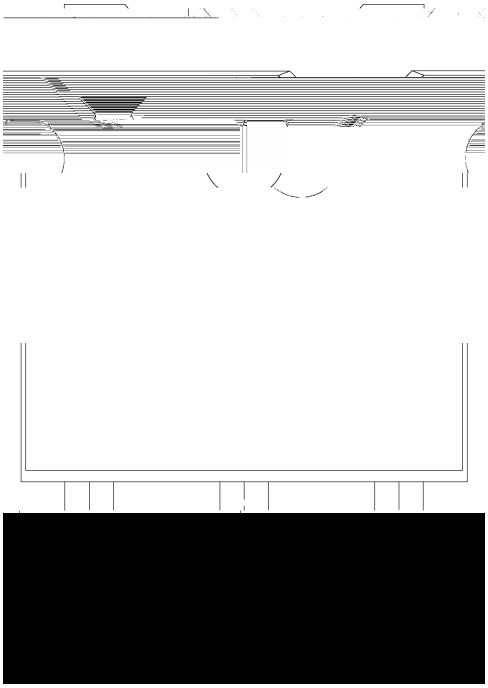


单位：mm

Symbol	Min	Max	Symbol	Min	Max
b	0.70	0.90	e2	4.43	4
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

TO-252

/ Marking Instructions



BR

Q

h_{FE}

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
D1815:	Product Type.
R:	h_{FE} Classifications Symbol
****:	Lot No