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/ Descriptions

TO-252 NPN

Silicon NPN transistor in a TO-252 Plastic Package.

/ Features

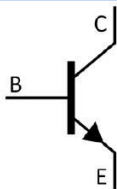
AEC-Q101

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

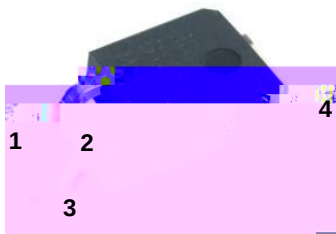
/ Applications

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

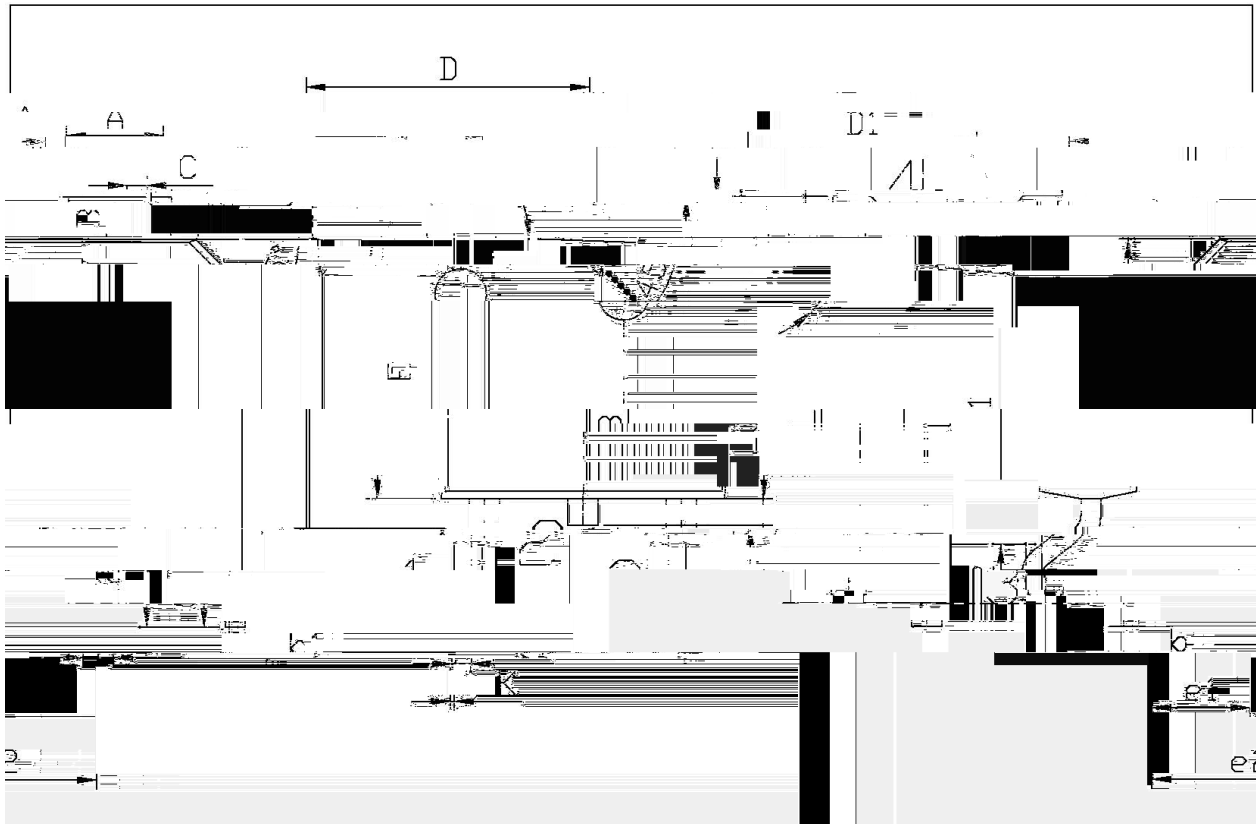
/ h_{FE} Classifications & Marking

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_C	3	A
Collector Current – Continuous(Pulse)	I_{CP}	6	A
Collector Power Dissipation	P_C	1	W
Collector Power Dissipation	$P_C(T_c=25^{\circ}C)$	10	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	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				

/ Package Dimensions

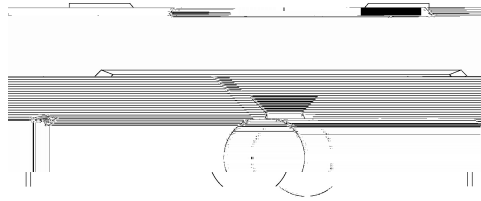
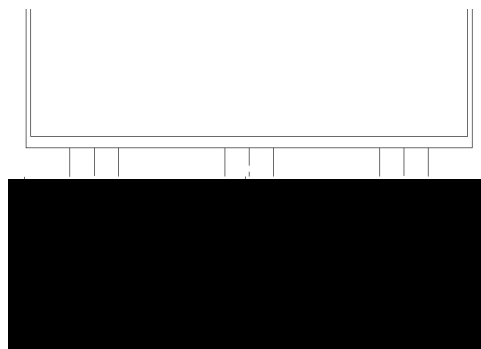


单位: mm

Dimensions in Millimeters				Dimensions in Millimeters			
Min		Max		Min		Max	
A		6.95		A		6.95	
C		4.43		C		4.43	
D		10.75		D		10.75	
D1		5.10		D1		5.10	
e2		0.70		e2		0.70	
K		0.60		K		0.60	
L		0.90		L		0.90	
P		0.10		P		0.10	

T0-252

/ Marking Instructions



BR

Q

D1815

R: h_{FE}

Note:

BR: Company Code

Q: Automobile halogen-free product Code

D1815: Product Type.

R: h_{FE} Classifications Symbol

****: Lot No

