



E	2016-5				
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A 2021



TO-252 PNP Silicon PNP transistor in a TO-252 Plastic Package.

h_{FE} AEC-Q101

Low saturation voltage, excellent h_{FE} linearity and high h_{FE} , Qualified to AEC-Q101 Standards for High Reliability, HF Product.

3

Output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver, Meet the stringent requirements of automotive applications.



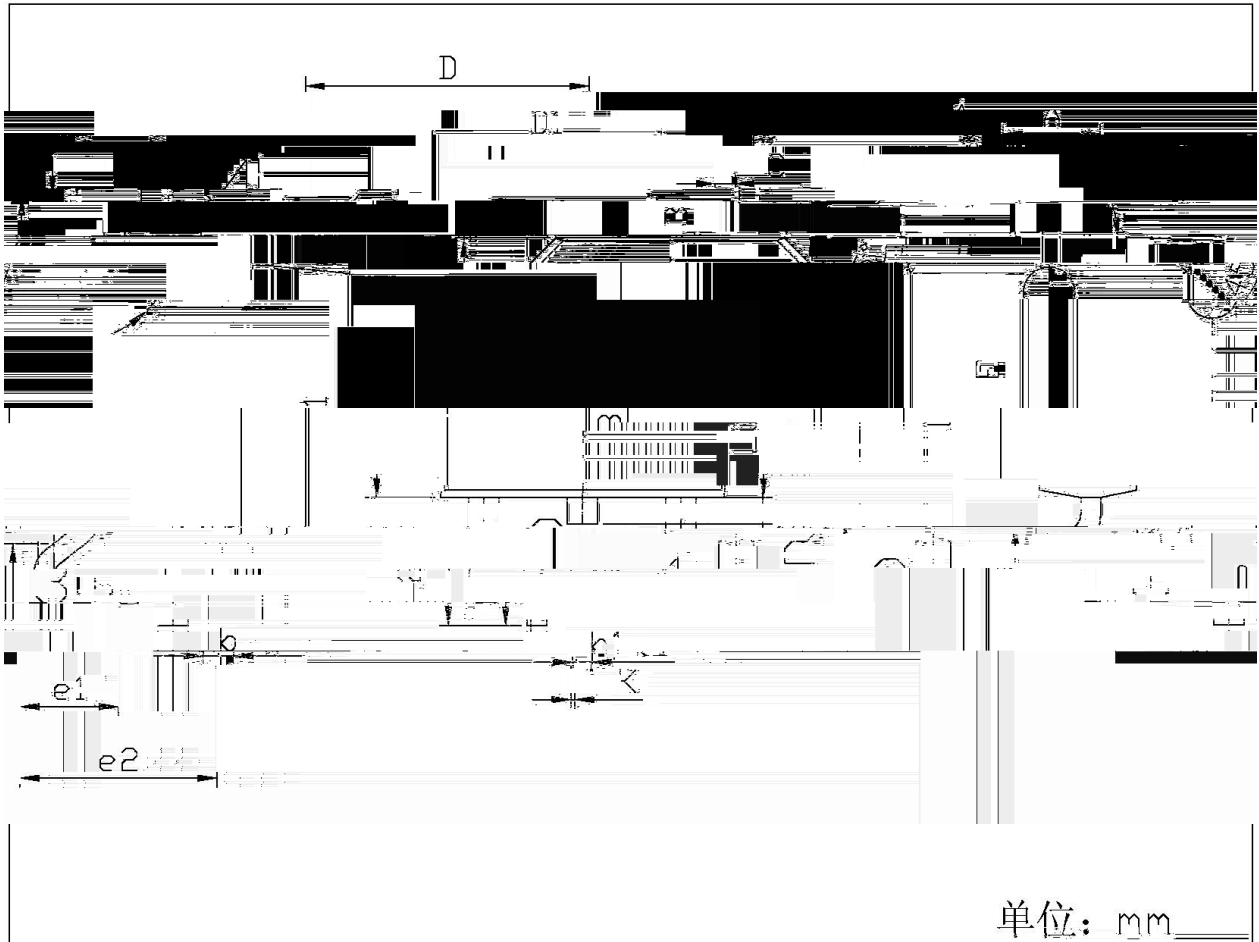
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

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



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_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Power Dissipation	P_C	1.0	W
	$P_C(T_C=25^\circ\text{C})$	10	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

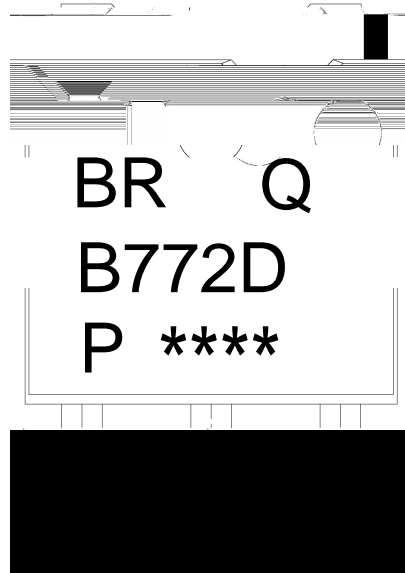
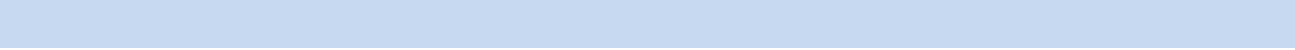
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-100\mu\text{A}$ $I_E=0$	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1\text{mA}$ $I_B=0$	-30			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-10\mu\text{A}$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30\text{V}$ $I_E=0$			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-3.0\text{V}$ $I_C=0$			-1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2.0\text{V}$ $I_C=-1.0\text{A}$	60	160	400	
	$h_{FE(2)}$	$V_{CE}=-2.0\text{V}$ $I_C=-20\text{mA}$	30	220		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2.0\text{A}$ $I_B=-0.2\text{A}$		-0.3	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2.0\text{A}$ $I_B=-0.2\text{A}$		-1.0	-2.0	V
Transition Frequency	f_T	$I_C=-1.0\text{A}$ $V_{CE}=-5.0\text{V}$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}$ $f=1.0\text{MHz}$ $I_E=0$		55		pF



单位: mm

Dimensions in Millimeters		Dimensions in Millimeters	
Min	Max	Min	Max
6.05	6.25	2.00	2.40
4.73		0.70	0.90
0.45	0.55	0.45	0.55
2.00		6.45	6.75
0.90		D1	0.60
0.10		D1	0.00

TΠ-252



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- Q: ° / fl fl Ł Ł Ź Ź !
- B772D: ° " # ~ |
- P: ° h \$ % ~ |
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Note:

- BR: Company Code
- Q: Automobile halogen-free product Code
- B772D: Product Type Code
- P: h_{FE} Classifications Symbol
- ****: Lot No. Code, code change with Lot No



Rev.A Dec.-2021

