E	2016-5				
F	2020-4-27	1			

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.

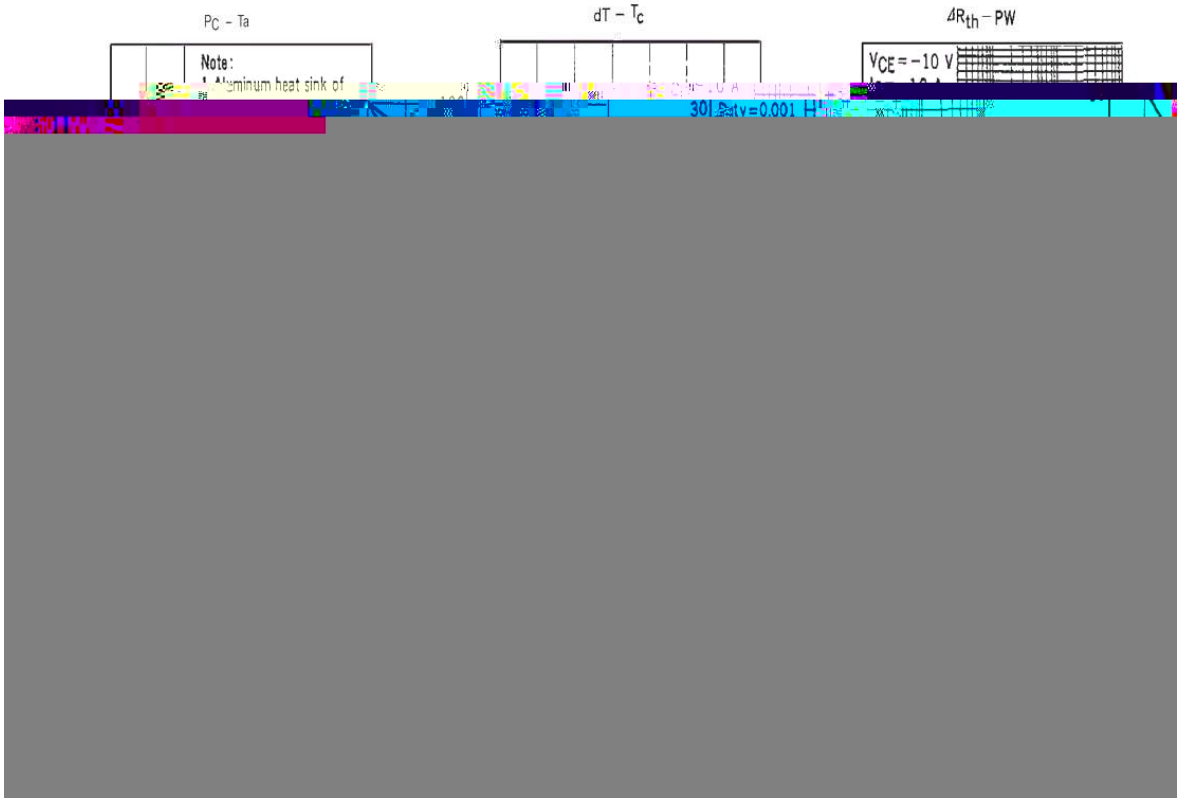


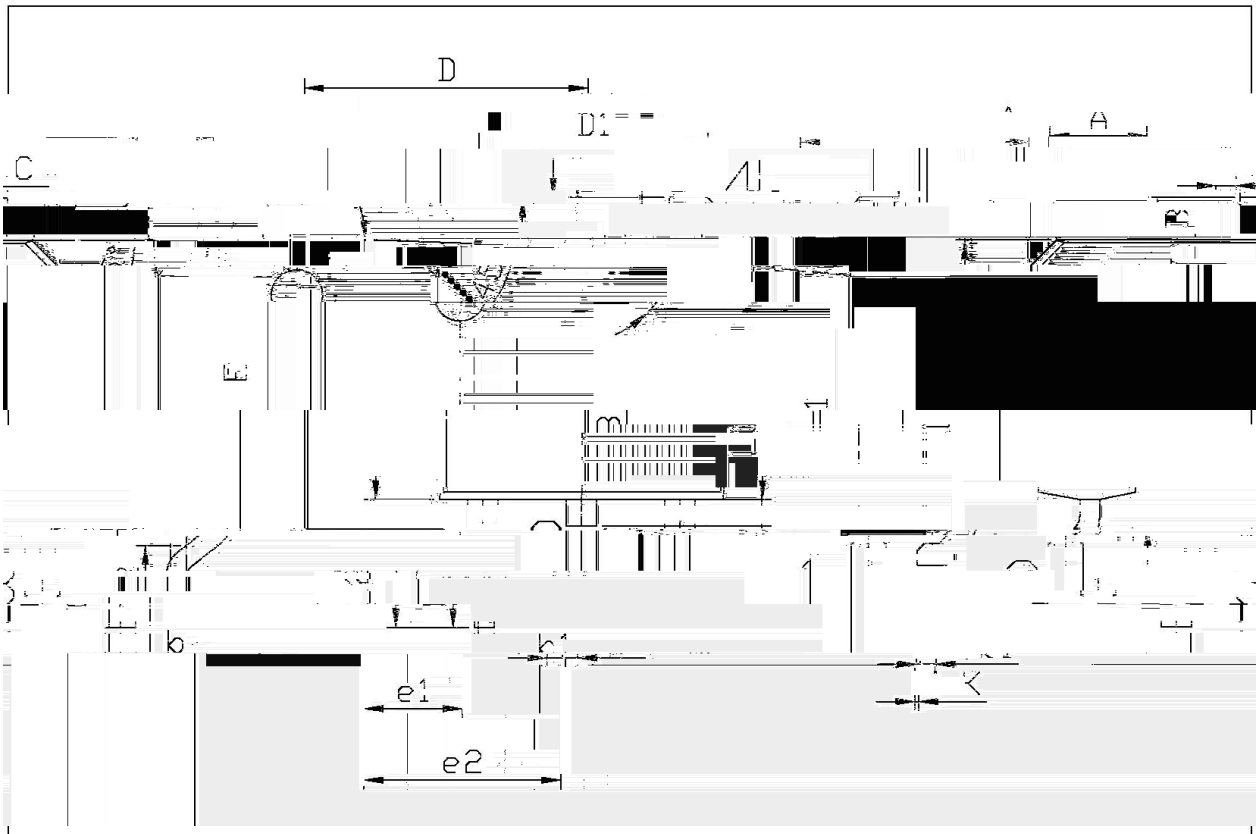
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

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
	$P_C(T_C=25℃)$	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=-100μA I_E=0	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1mA I_B=0	-30			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-3.0V I_C=0			-1.0	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-2.0V I_C=-1.0A	60	160	400	
	$h_{FE(2)}$	V_{CE}=-2.0V I_C=-20mA	30	220		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2.0A I_B=-0.2A		-0.3	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-2.0A I_B=-0.2A		-1.0	-2.0	V
Transition Frequency	f_T	I_C=-1.0A V_{CE}=-5.0V		80		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		55		pF

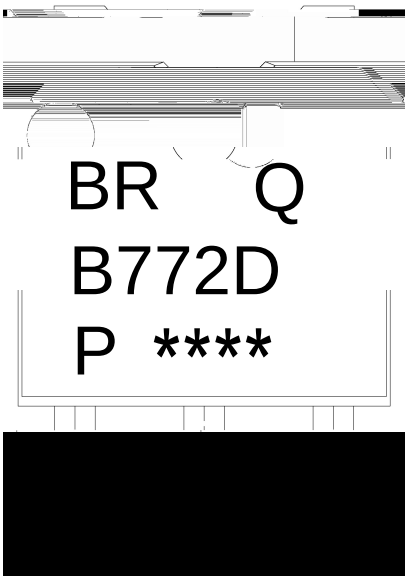

PC - Ta
Note:
dT - Tc
ΔRth - PW
VCE = -10 V



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.43	4.73	b	0.70	0.90
c	0.45	0.55	e2	1.70	2.50
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

TO-252



BR	! " # $ %
Q	! & ' ( ) * + , -
B772D	! . / $ %
P:	! h 0 1 $ %
****	! 2 * 3 / $ % 4 5 2 * 3 / 6 7 8

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