/ Descriptions

Silicon PNP transistor in a TO-252 Plastic Package.

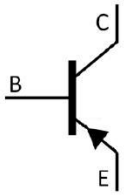
/ Features

Excellent hFE linearity, low $V_{CE(sat)}$, high P_C, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

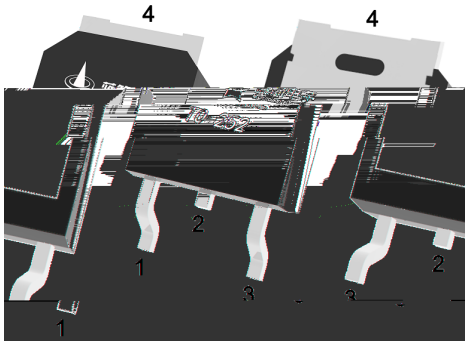
/ Applications

Audio frequency amplifier and switching, especially in hybrid integrated circuits 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	M	L	K
h_{FE} Range	100 200	160 320	200 400

/ Absolute Maximum Ratings(Ta=25)

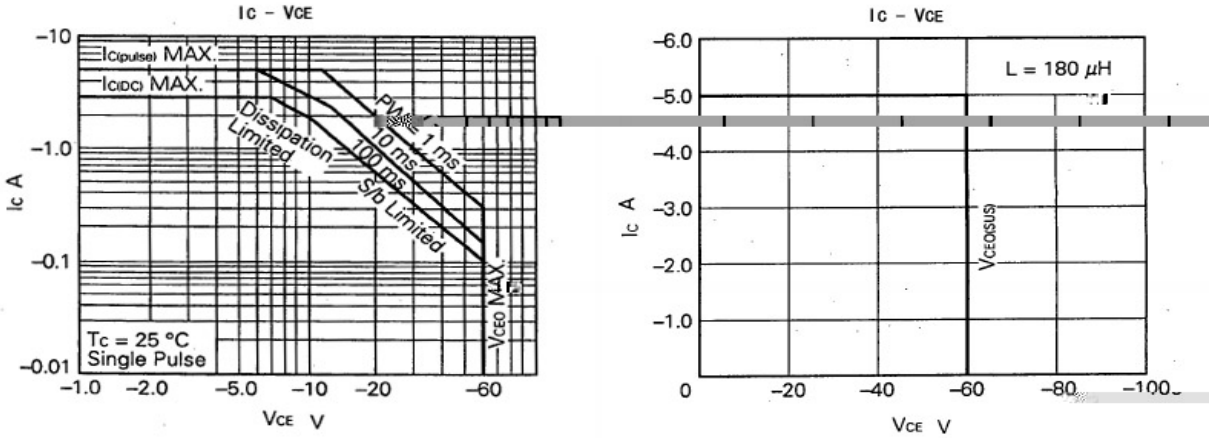
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Power Dissipation*	*P_C	2.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

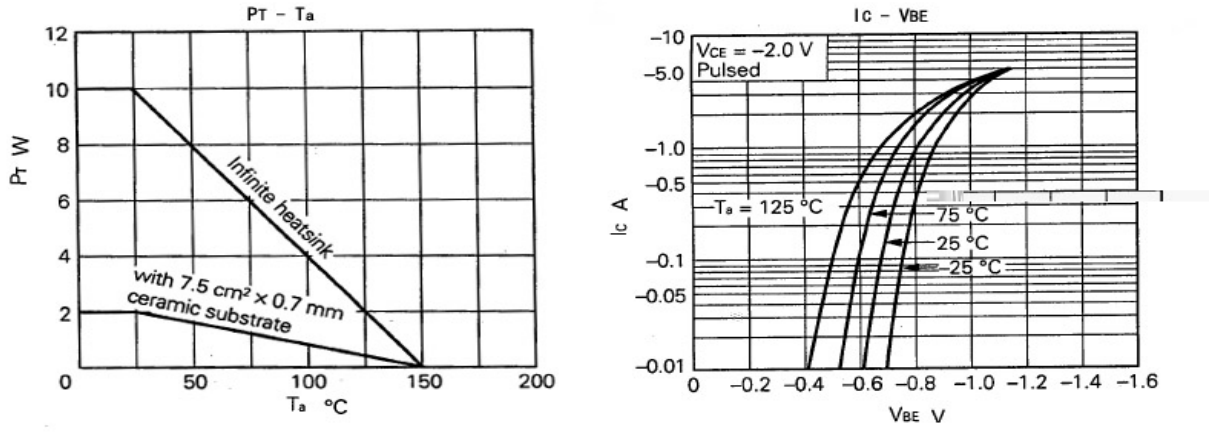
*When mounted on a 7.5×7.5×0.7mm ceramic board.

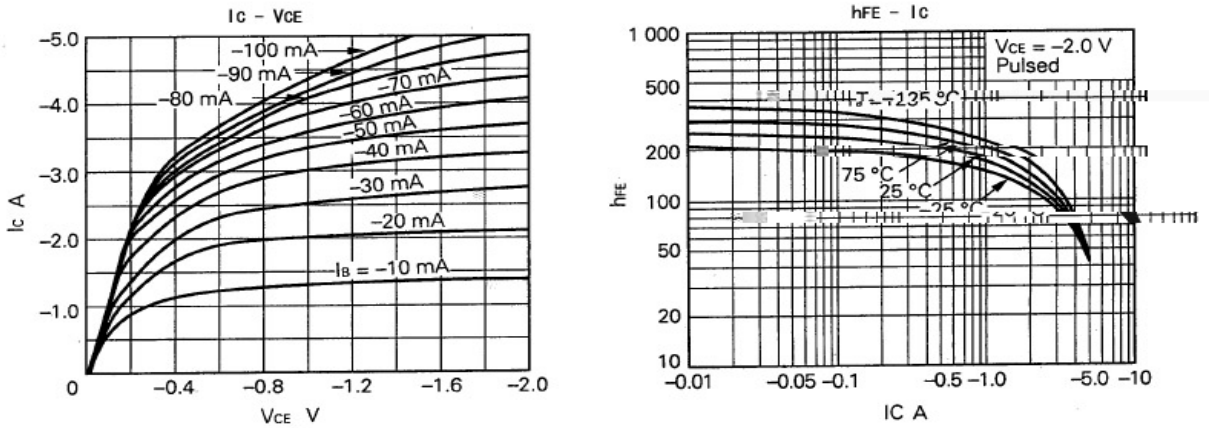
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-0.1mA I_E=0	-60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-0.1mA I_C=0	-7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-60V I_E=0			-10	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-7.0V I_C=0			-10	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-2.0V I_C=-600mA	100		400	
	$h_{FE(2)}$	V_{CE}=-2.0V I_C=-200mA	60			
	$h_{FE(3)}$	V_{CE}=-2.0V I_C=-2.0A	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-1.5A I_B=-150mA			-0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-1.5A I_B=-150mA			-1.2	V
Transition Frequency	f_T	V_{CE}=-5.0V I_C=-1.5A		50		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		40		pF
Turn-On Time	t_{on}	V_{CC}=-10V I_C=-1.0A I_{B1}=-I_{B2}=-0.1A R_L=10Ω			0.5	us
Storage Time	t_{stg}				2.0	
Fall Time	t_f				0.5	

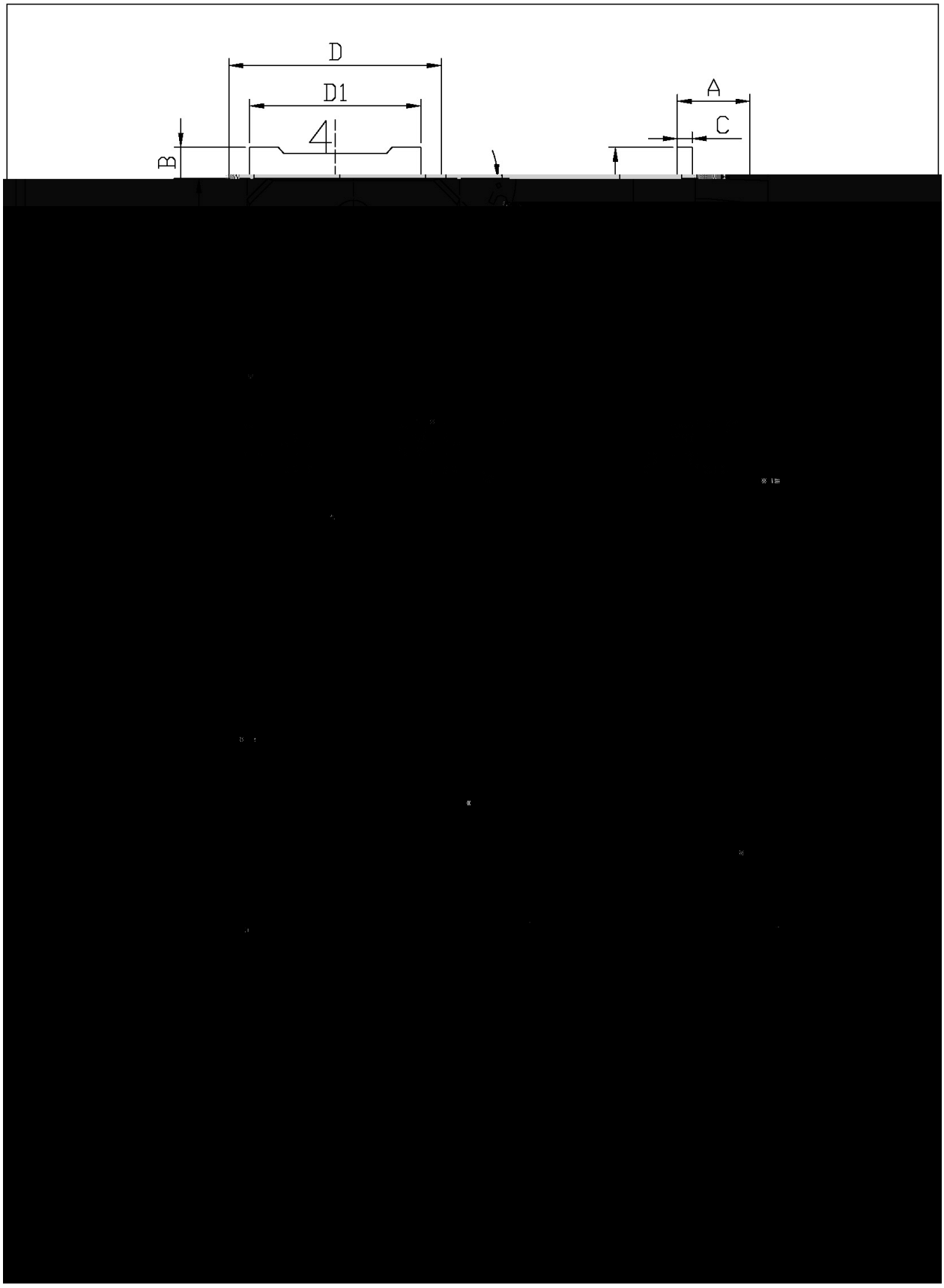
/ Electrical Characteristic Curve



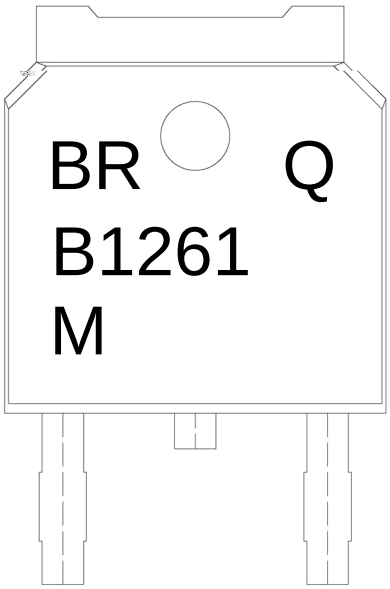




/ Package Dimensions



/ Marking Instructions



BR

Q

h_{FE}

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
B1261:	Product Type
M:	h_{FE} Classifications Symbol
****:	Lot No. Code, code change with Lot No

( ) /

Note:

1	150 200 60 120sec;	1.Preheating:150~200 , Time:60~120sec.
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

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm^3)