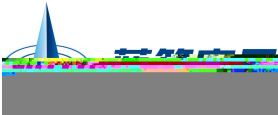


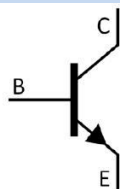
E	2016-5				
F	2021-4-20	1			
A	2022-4-23	all	BR Q TO-252 TO-252#, AEC-Q101 Q 245±5°C 5 ±0.5sec 255 ±5°C 5±0.5sec		



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

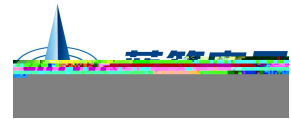
BR2SB649ADQ AEC-Q101
Complementary pair with BR2SB649ADQ, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Low frequency power amplifier, Meet the stringent requirements of automotive applications.



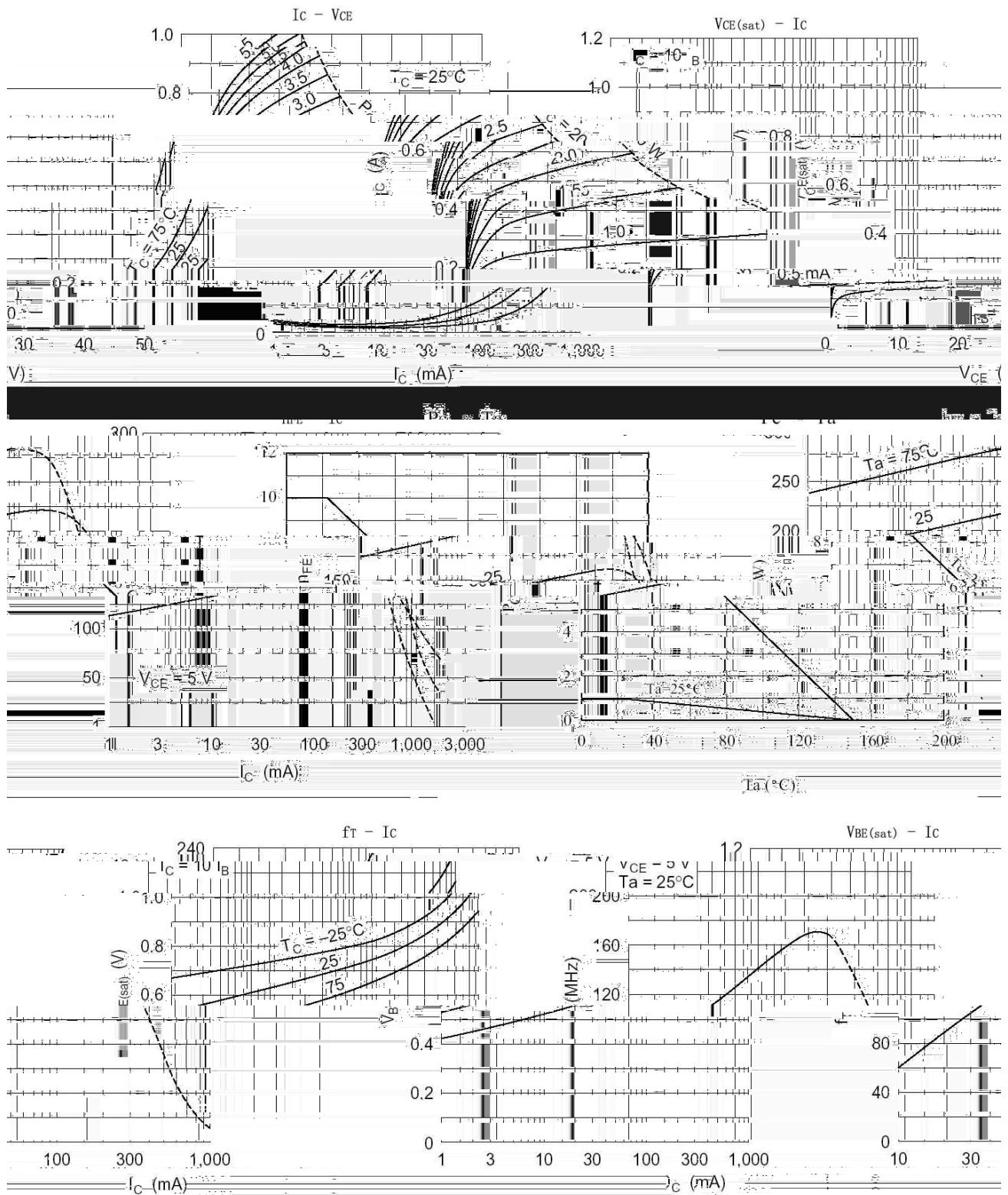
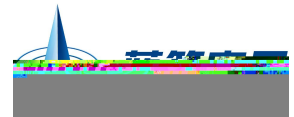
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

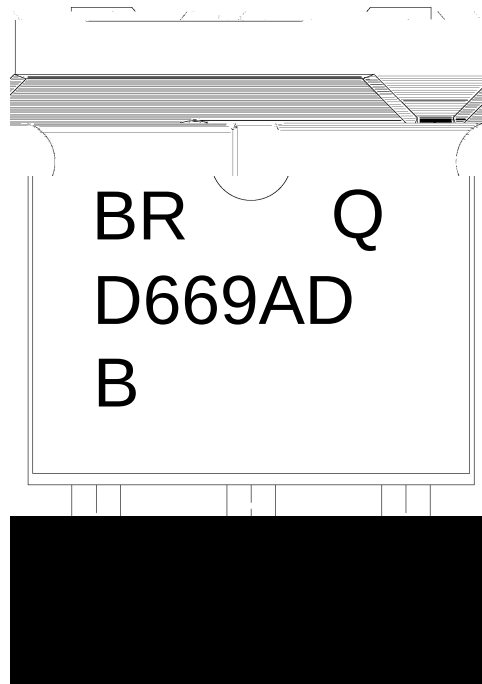
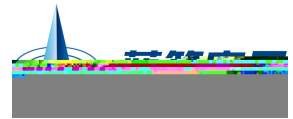
h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60~120	100~200	160~320



Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	180	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	1.5	A
Collector Current – Continuous(Pulse)	I_{CP}	3.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_c=25^{\circ}\text{C})$	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}	$I_C=1.0\text{mA}$ $I_E=0$	180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10\text{mA}$ $R_{BE}=\infty$	160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=1.0\text{mA}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=160\text{V}$ $I_E=0$			10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0\text{V}$ $I_C=150\text{mA}$	60		320	





BR

Q

D669AD

B: h_{FE}

Note:

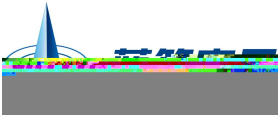
BR: Company Code

Q: Automobile halogen-free product Code

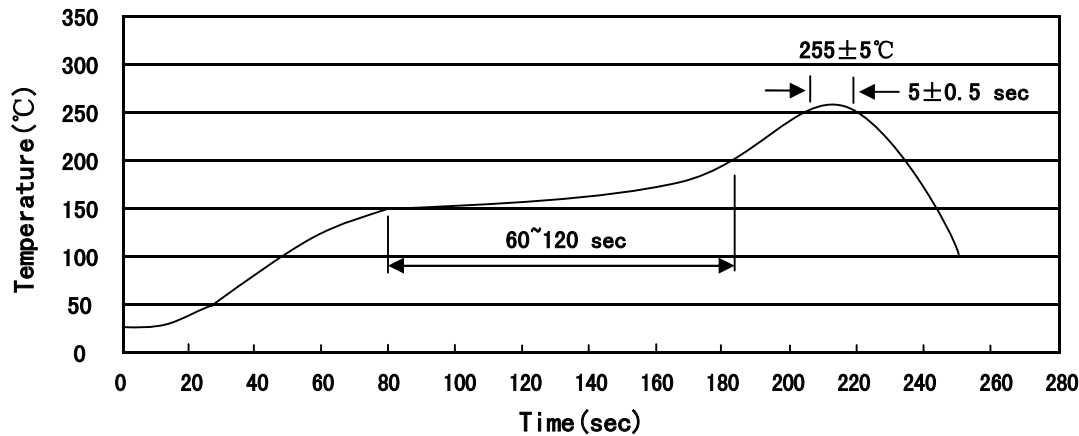
D669AD: Product Type

B: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No



Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1. Preheating: 150~200°C, Time: 60~120sec.
2. Peak Temp.: 255±5°C, Duration: 5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
							盒	箱
						"		

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
						套管	盒	箱