

BR2SD1899Q

/ Descriptions

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

/ Features

 f_T

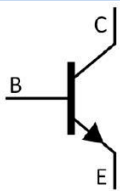
AEC-Q101

Low $V_{CE(sat)}$, high current and high f_T , excellent linearity of h_{FE} , fast switching time, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

/ Applications

Relay drivers, high-speed inverters, general high-current switching applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



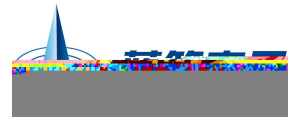
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications
Symbol

BR2SD1899Q

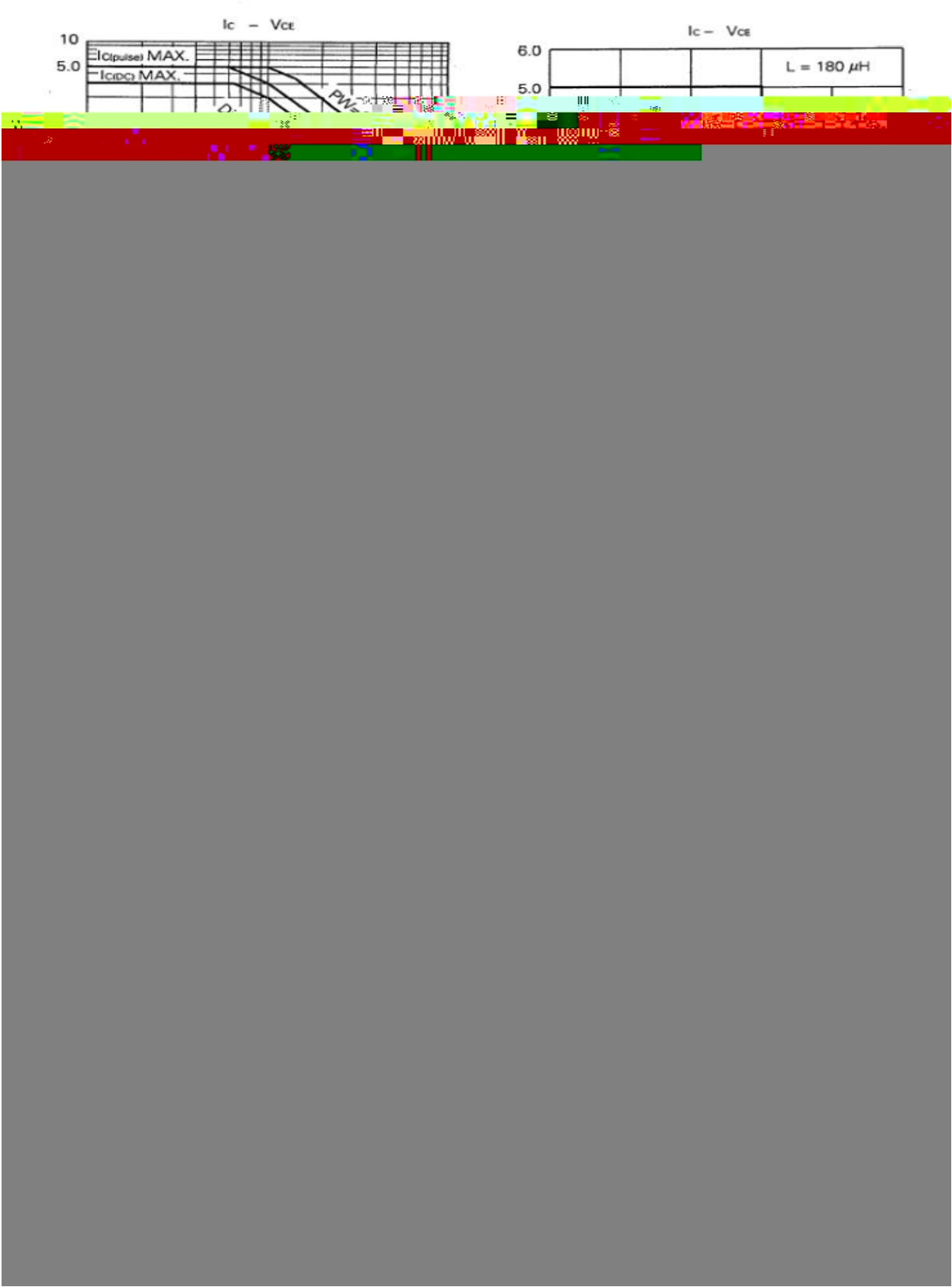
Rev.A Feb.-2022



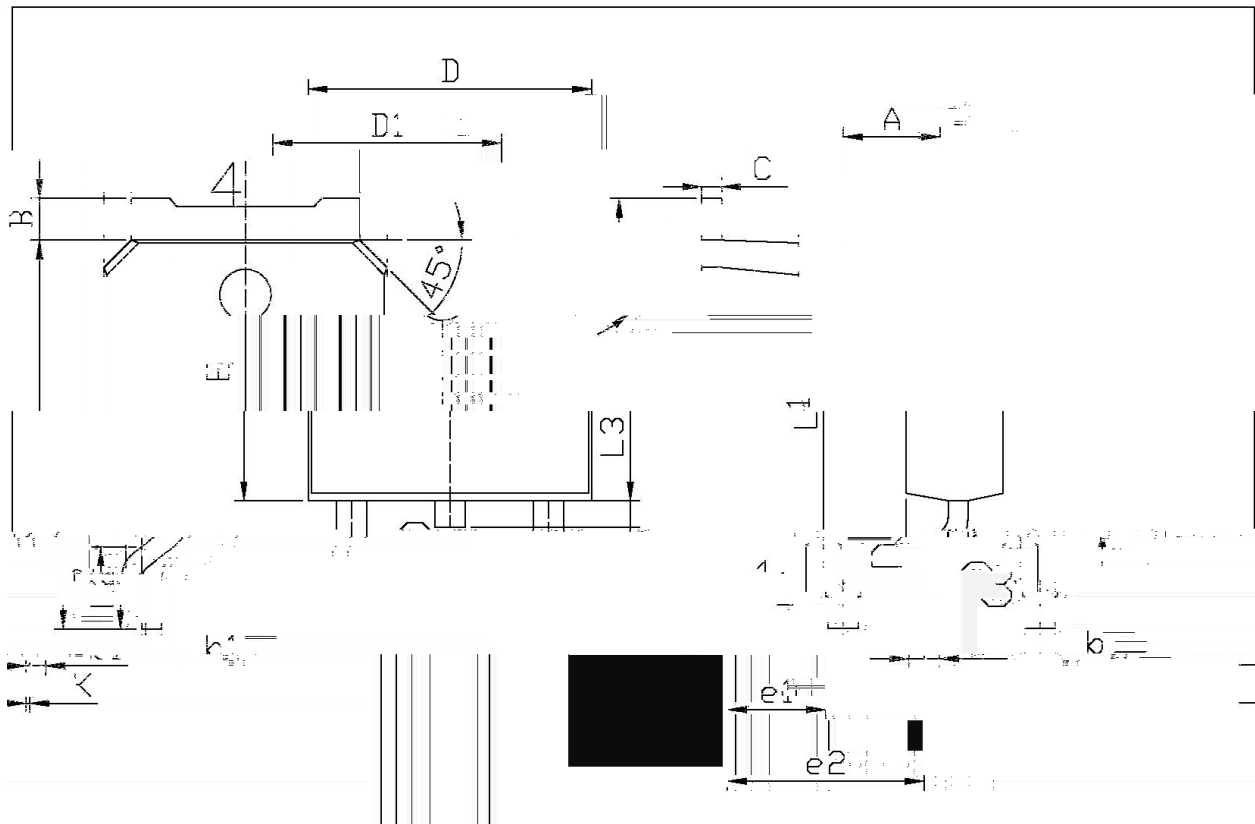
DATA SHEET

参数 Parameter	符号 Symbol	数值 Rating	单位 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

/ Electrical Characteristic Curve



I Package Dimensions



單位: mm

Dimensions in millimeters				Dimensions in millimeters			
Symbol	Max	Min	Symbol	Max	Min	Symbol	Max
D	6.70	6.45	D1	5.95	5.70	A	2.90
B	0.95	0.70	E	0.25	0.20	C	0.10
e1	2.24	2.20	e2	4.48	4.43	b	2.90
L1	9.85	9.80	L3	10.35	10.30	b1	0.60
K	0.00	0.00					

0.45	0.45	0.45	0.45	0.45	0.45
D	6.45	6.75	L3	0.60	0.60
D1	5.10	5.50	K	0.00	0.00

T0-252

/ Marking Instructions



BR

Q

h_{FE}

Note:

BR: Company Code

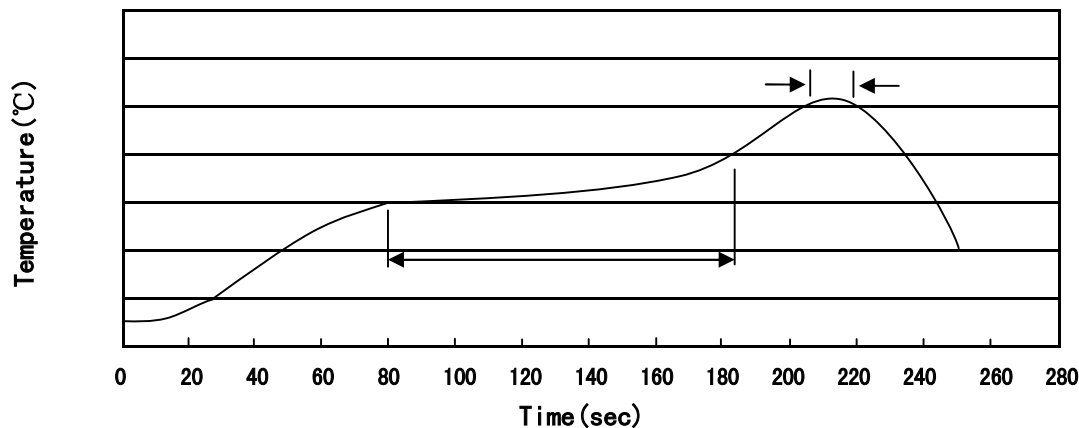
Q: Automobile halogen-free product Code

D1899: Product Type

M: h_{FE} Classifications Symbol

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

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

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

/ Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices