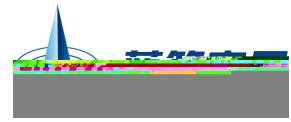


BR2SD1899Q

BR2SD1899Q

Rev.A Feb.-2022



DATA SHEET

/ Descriptions

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

/ Features

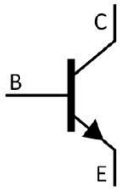
f_T AEC-Q101

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



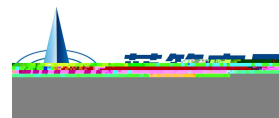
PIN1 Base PIN 2,4 Collector PIN 3 < Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	M	L	K
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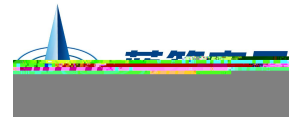
BR2SD1899Q

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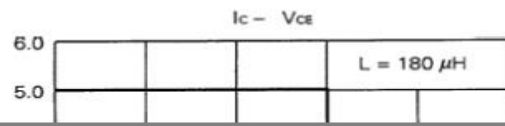
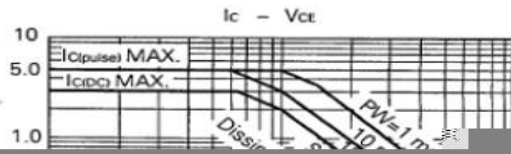


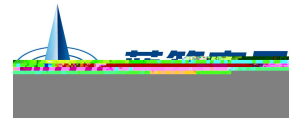
DATA SHEET

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_{CE0}		V
Emitter to Base Voltage	V_{EB0}		V

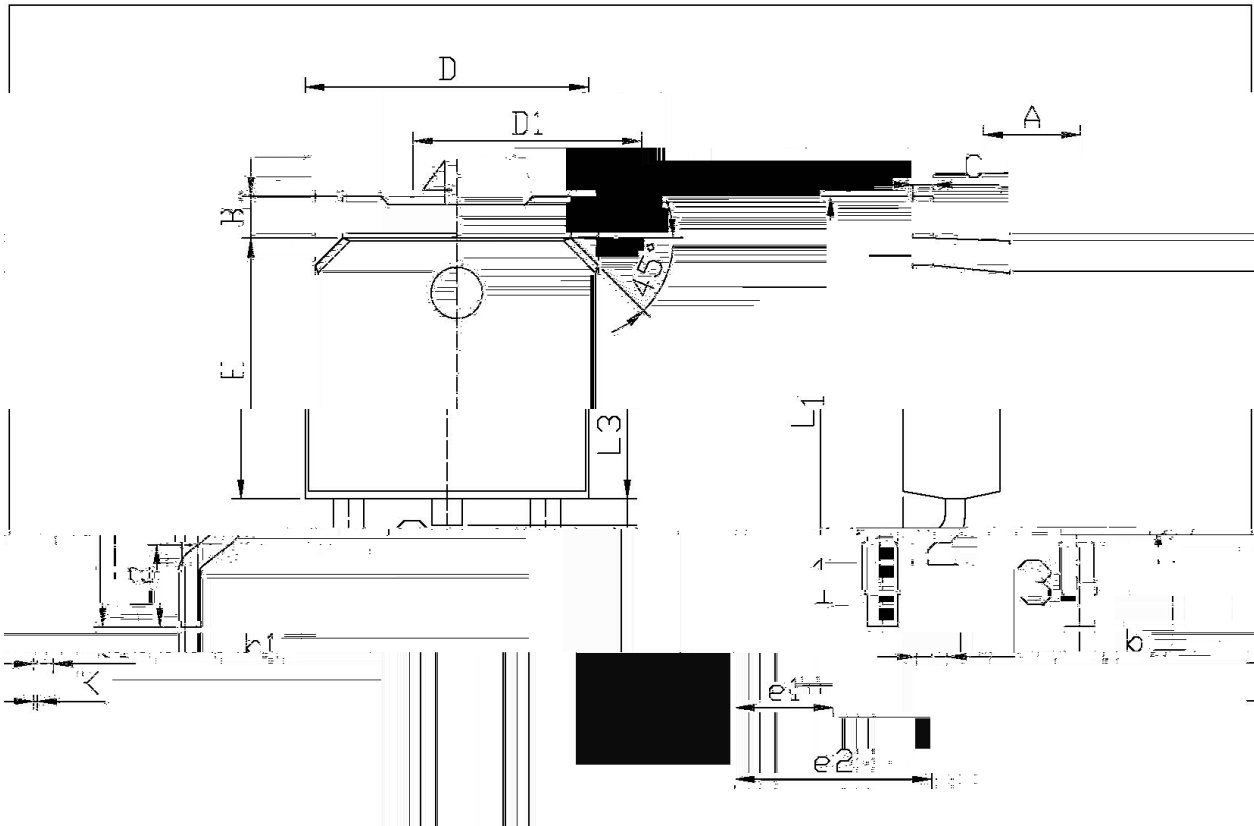


/ Electrical Characteristic Curve





/ Package Dimensions

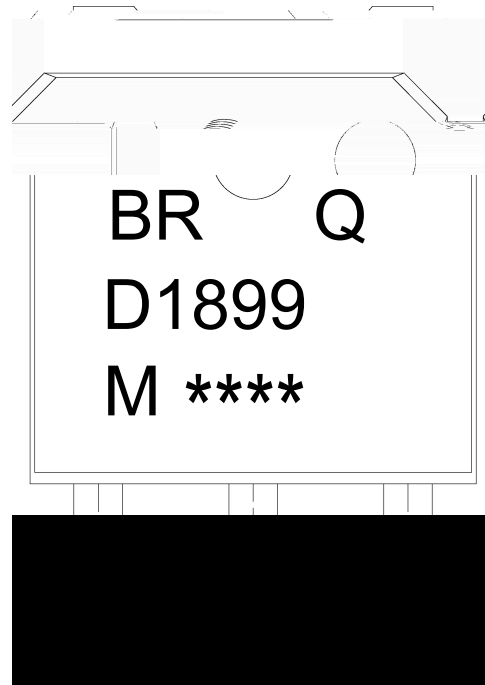


单位: mm

Dimensions in Millimeters		Symbol		Dimensions in Millimeters		Symbol	
Min	Max			Min	Max		
5.95	6.25			2.20	2.40		
e1	2.24	2.24	2.34	e1	0.95	0.95	1.25
e2	4.43	4.43	4.73	b	0.70	0.70	0.90
E1	9.85	9.85	10.35	b1	0.45	0.45	0.55
C	0.45	0.55	L2	1.70	2.30		
D	6.45	6.75	L3	0.60	0.90		
D1	5.10	5.50	K	0.00	0.10		

T0-252

/ Marking Instructions



说明：

BR： 为公司代码

Q： 为汽车无卤产品标识

D1899： 为型号代码

M： 为 h_{FE} 分档代码

****： 为生产批号代码，随生产批号变化

Note:

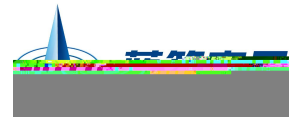
BR: Company Code

Q: Automobile halogen-free product Code

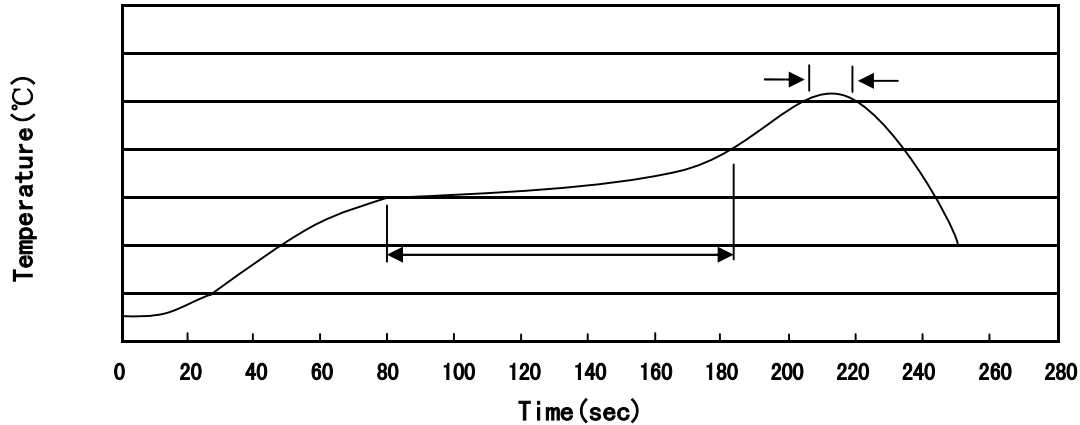
D1899: Product Type

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