

/ Descriptions

WR0<5 QSQ Silicon NPN transistor in a TO-92 Plastic Package.

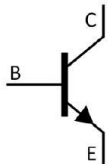
/ Features

5VD4< ; 4
High h_{FE} , complementary pair with 2SA1981.

/ Applications

Audio power amplifier application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	Y
h_{FE} Range	100~200	160~320

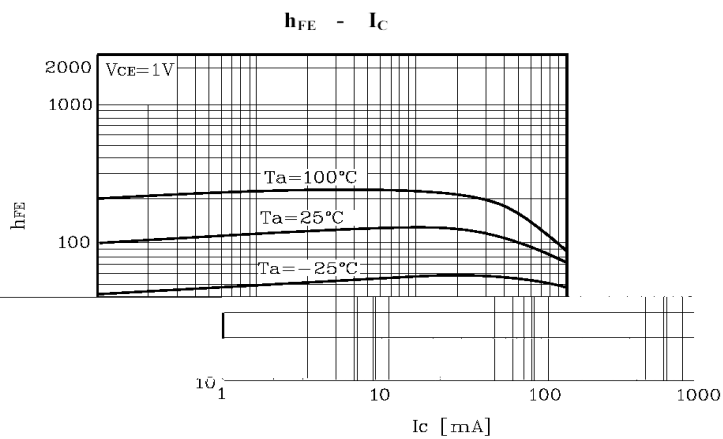
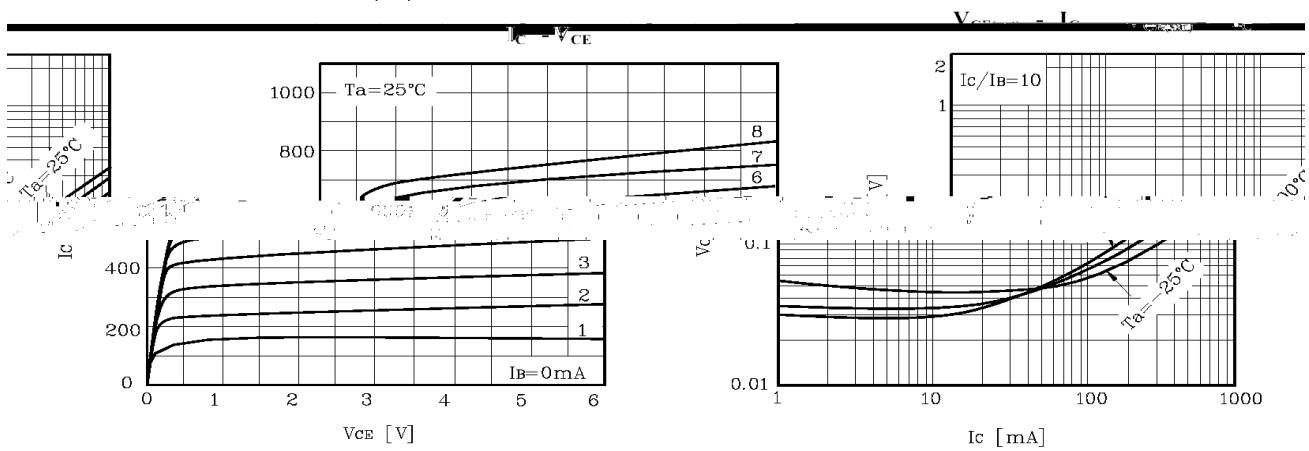
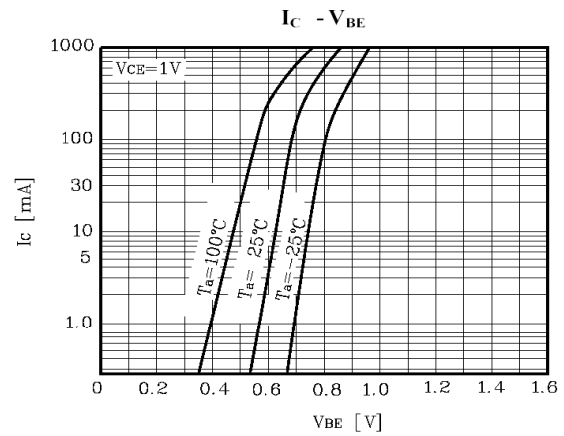
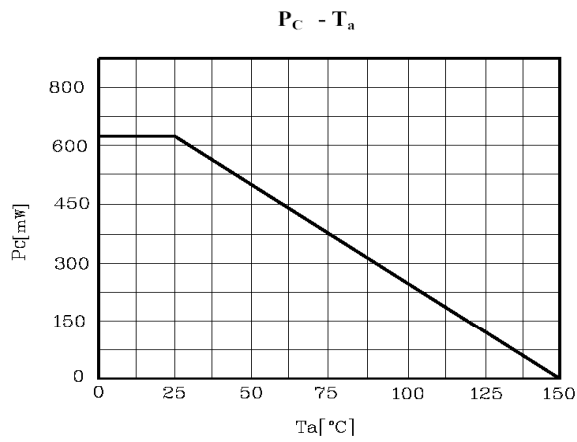
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\text{ A}$ $I_E=0$	35			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $I_B=0$	30			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=35\text{V}$ $I_E=0$			0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0\text{V}$ $I_C=0$			0.1	A
DC Current Gain	h_{FE}	$V_{CE}=1.0\text{V}$ $I_C=100\text{mA}$	100		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$			0.5	V
Transition Frequency	f_T	$V_{CE}=5.0\text{V}$ $I_C=10\text{mA}$		120		MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		13		pF

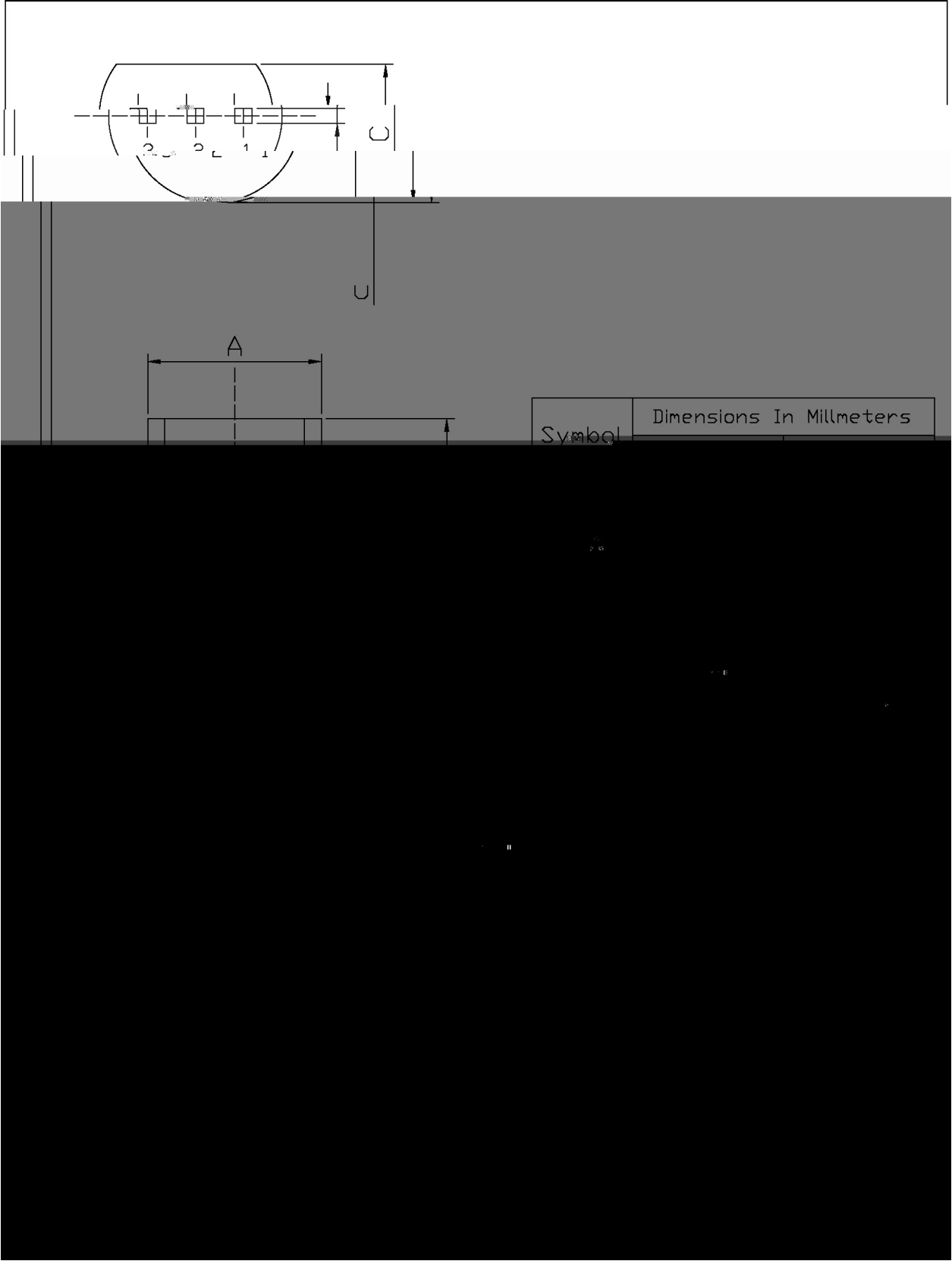
/ **Electrical Characteristic Curve**



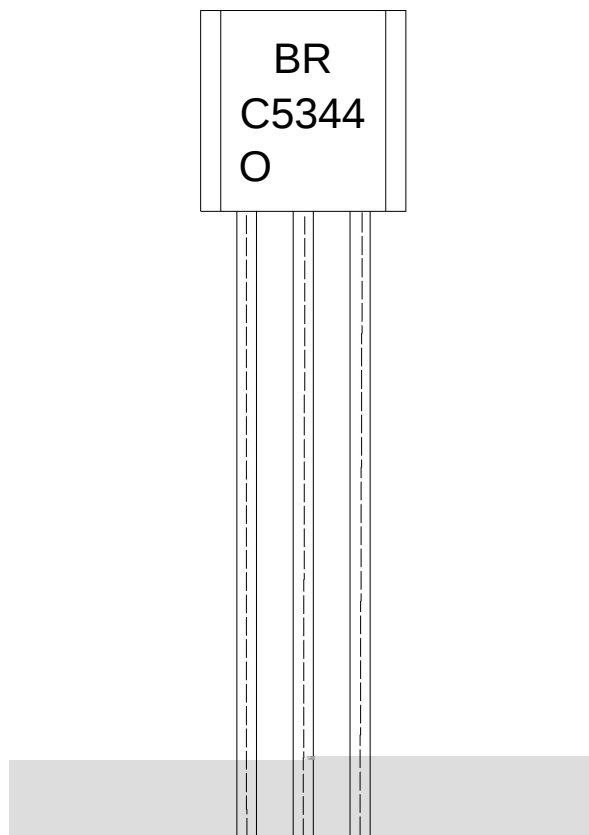
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



EU:

F8677

R: k_{IH}

Note:

BR: Company Code.

C5344: Product Type.

R: h_{FE} Classifications Symbol.

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|------|----|----------|---|
| 1 | 25 | 150% | 60 | 90sec; | 1.Preheating:25~150%, Time:60~90sec. |
| 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

270 ± 5 10 ± 1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	只 袋	袋 盒	只 盒	盒 箱	只 箱	袋	盒	箱

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	只 纸带	纸带 盒	纸带层 盒	盒 箱	只 箱	盒	箱	
							小箱	大箱

/ Notices