

/ Revised record

F	2017-4				
G	2020-5-15	1			
A	2022-4-23	all	BR/Q AEC-Q101 , H Q 245±5°C 5±0.5sec 255±5°C 0.5sec 5±		

SOT-23 PNP Silicon PNP transistor in a SOT-23 Plastic Package.

I_C BRBC817Q AEC-Q101

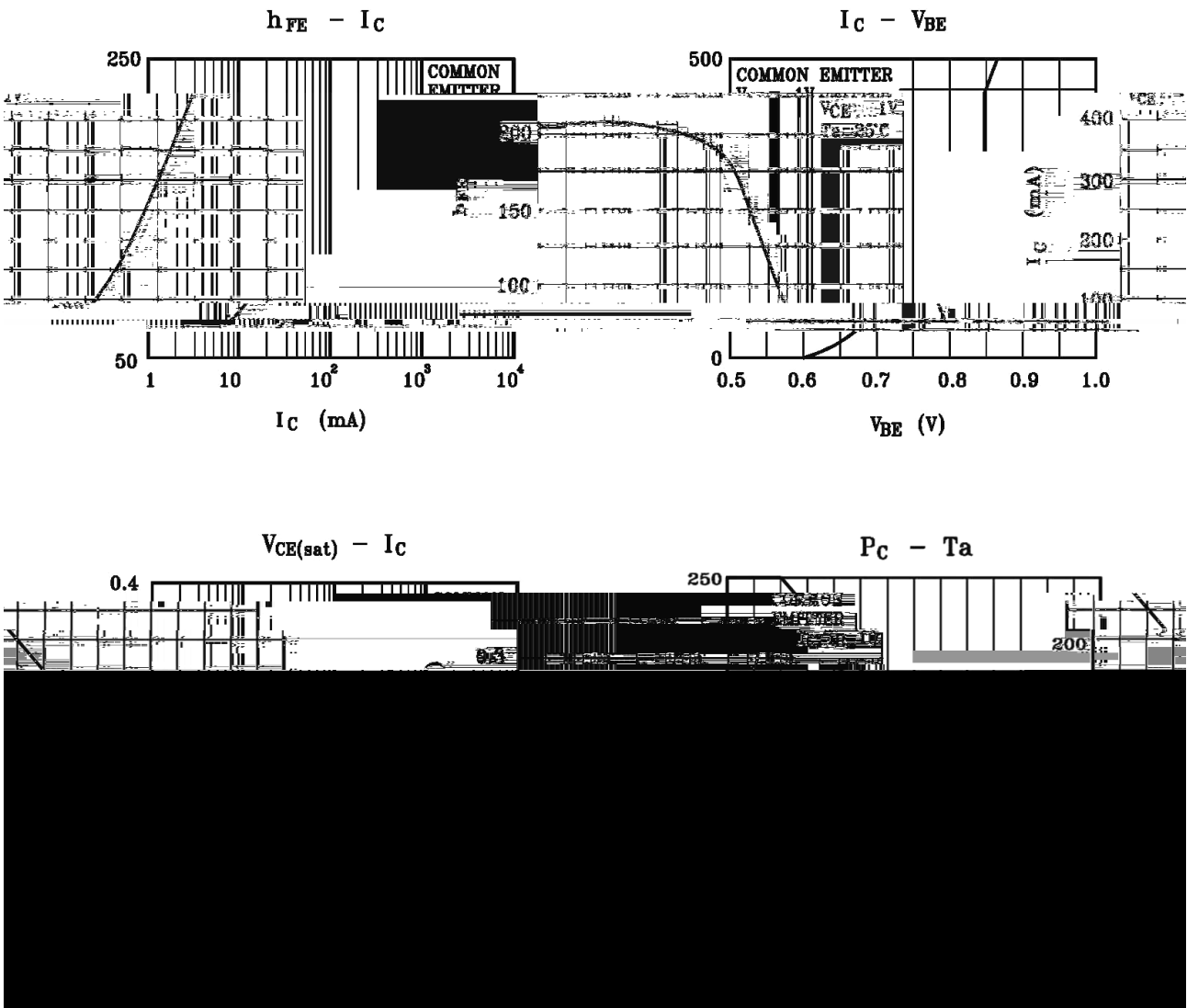
High I_C , complementary pair with BRBC817Q, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

General power amplifier and switching applications, Meet the string : d : d

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500	mA
Peak Collector Current - Continuous	I_{CM}	-1.0	A
Power Dissipation	P_C	250	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C = -10\mu A$ $I_E = 0$	-50			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -10mA^*$ $I_B = 0$	-45			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -10\mu A$ $I_C = 0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -20V$ $I_E = 0$			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -5.0V$ $I_C = 0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -1.0V$ $I_C = -100mA$	100			

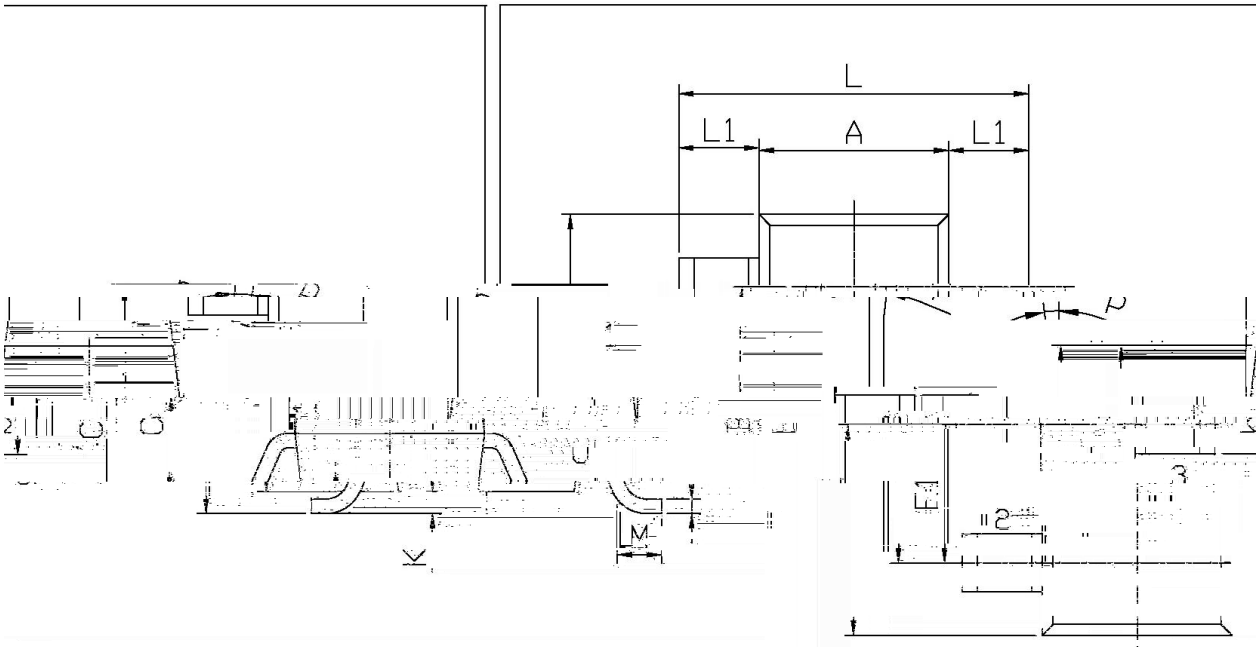
/ Electrical Characteristic Curve



/ Package Dimensions

UNIT: mm

图例



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
A	1.5	1.5	C1	0.65	0.90
B	2.70	3.10	C2	1.50	3.05
D	0.45	0.65	K	0	0
E	0.85	0.05	P	0	0
F	0.35	0.35			

/ Marking Instructions

说明：

Q： 为汽车无卤产品标识

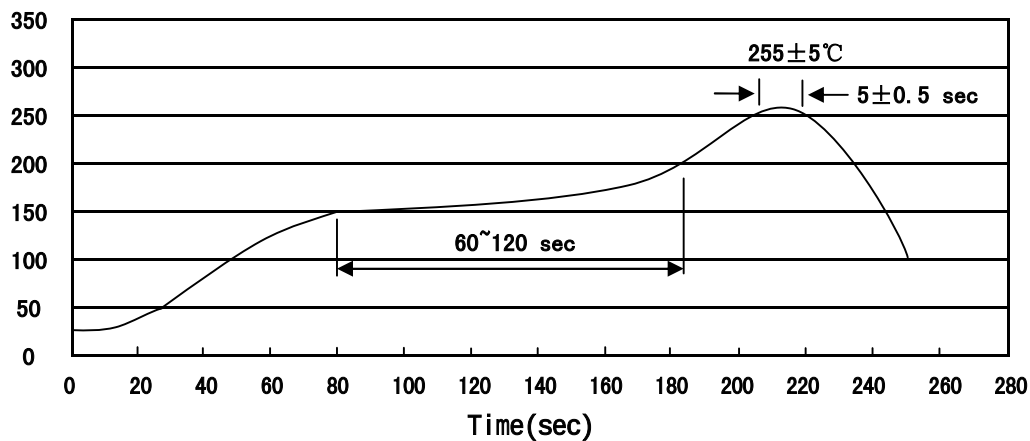
5A： 为型号代码

Note:

Q: Automobile halogen-free product Code

5A: Product Type Code

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



Note:

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

/ Resistance to Soldering Heat Test Conditions

260 ± 5 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 /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7" x8	180×120×180	390×385×205

/ Notices