



/ Revised record

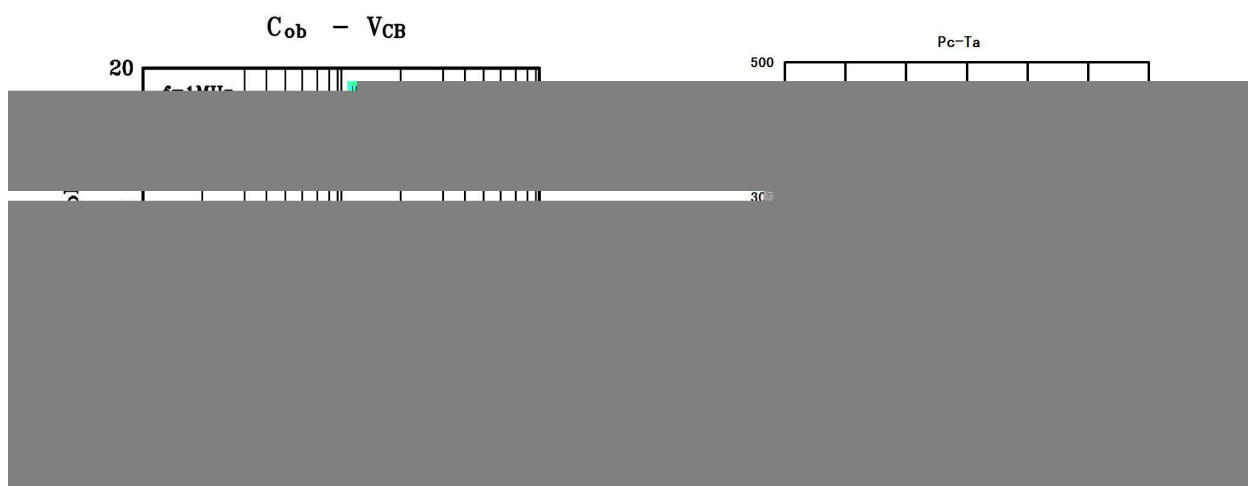
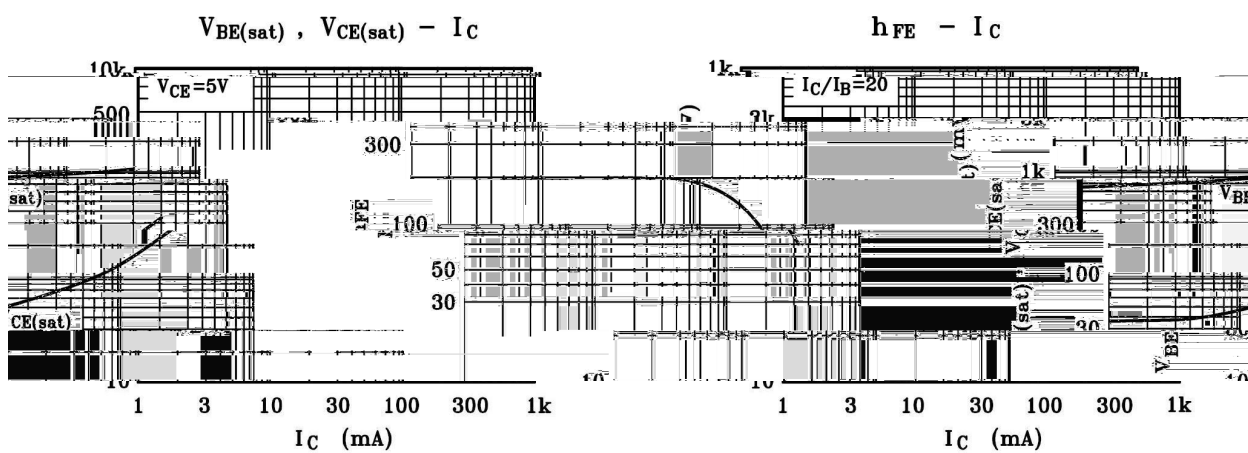
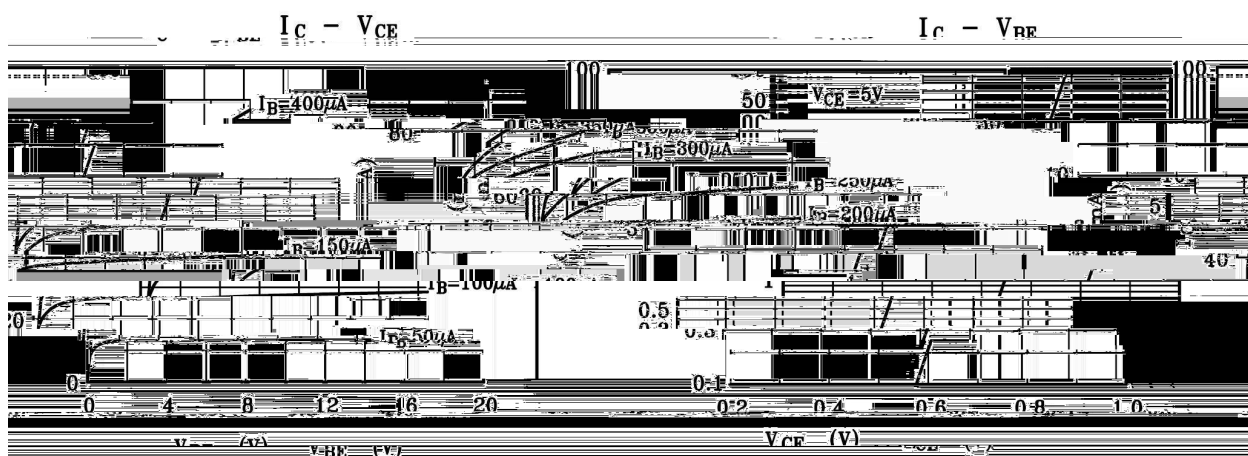
F	2017-4				
G	2020-5-18	1			
A	2022-2-21	all	BR Q AEC-Q101 H Q 245±5°C 5±0.5sec 255±5°C 5±0.5sec		

SOT-23 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a SOT-23

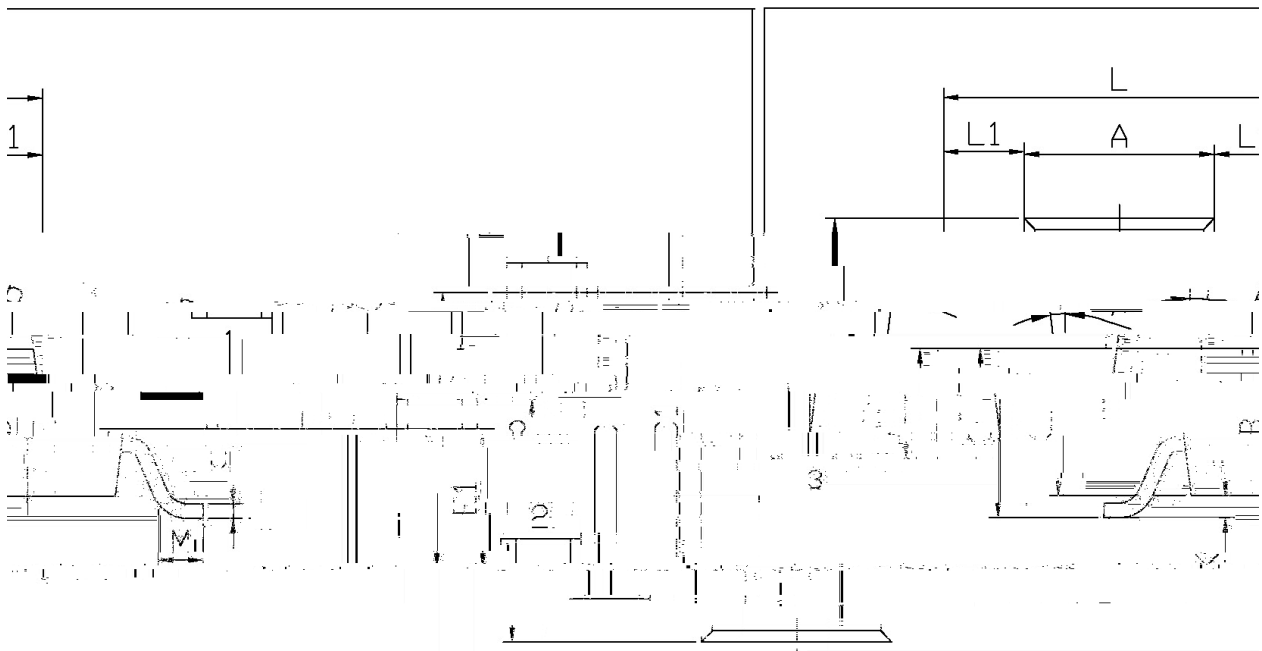
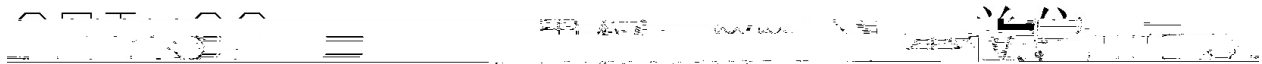
参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-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 Cut-Off Current	I_{CBO}	$V_{CB}=30V$ $I_E=0$			0.015	μA
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=2.0mA$	110		800	
Collector to Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=10mA$ $I_B=0.5mA$		0.09	0.25	V
	$V_{CE(sat)2}$	$I_C=100mA$ $I_B=5.0mA$		0.2	0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)1}$	$I_C=10mA$ $I_B=0.5mA$		0.7		V
	$V_{BE(sat)2}$	$I_C=100mA$ $I_B=5.0mA$		0.9		V
Base to Emitter Voltage	$V_{BE(on)1}$		0.5		0.7	V
	$V_{BE(on)2}$					

/ Electrical Characteristic Curve

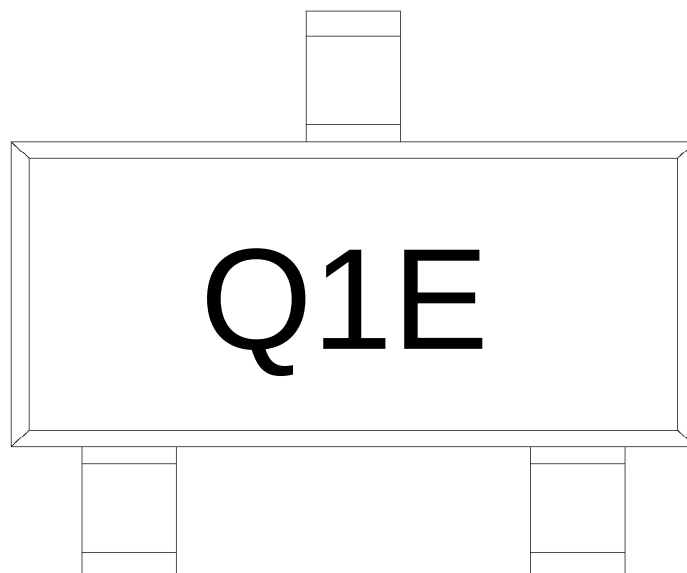


/ Package Dimensions



In Millimeters		Symbol		Dimensions In Millimeters		Symbol		Dimensions	
Max				Min	Max			Min	
1.00				0.85	1.00			0.85	1.00
0.90				0.75	0.90			0.75	0.90
0.85				0.70	0.85			0.70	0.85
0.80				0.65	0.80			0.65	0.80
0.75				0.60	0.75			0.60	0.75
0.70				0.55	0.70			0.55	0.70
0.65				0.50	0.65			0.50	0.65
0.60				0.45	0.60			0.45	0.60
0.55				0.40	0.55			0.40	0.55
0.50				0.35	0.50			0.35	0.50
0.45				0.30	0.45			0.30	0.45
0.40				0.25	0.40			0.25	0.40
0.35				0.20	0.35			0.20	0.35
0.30				0.15	0.30			0.15	0.30
0.25				0.10	0.25			0.10	0.25
0.20				0.05	0.20			0.05	0.20
0.15				0.00	0.15			0.00	0.15
0.10				0.00	0.10			0.00	0.10
0.05				0.00	0.05			0.00	0.05
0.00				0.00	0.00			0.00	0.00

/ Marking Instructions



说明：

Q： 为汽车无卤产品标识

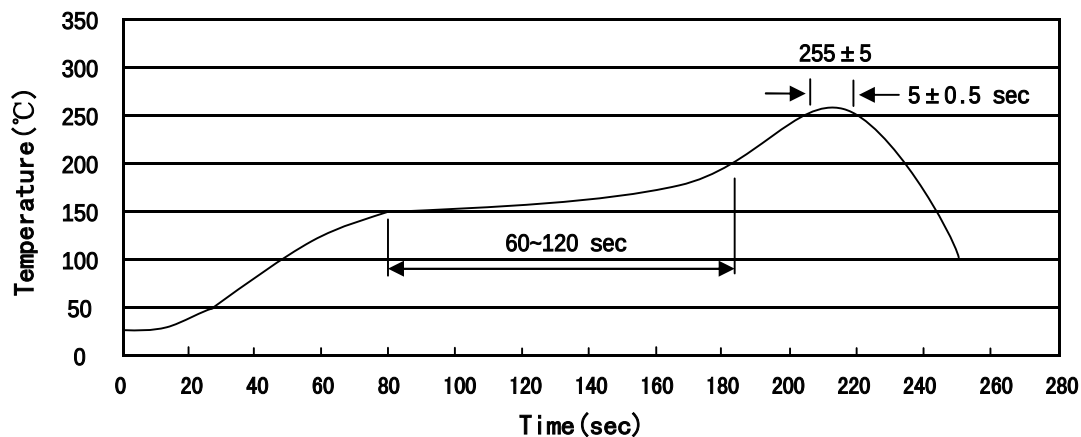
1E： 为型号代码

Note:

Q: Automobile halogen-free product Code

1E: Product Type Code

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



说明：

- 1、预热温度 150 ~ 200°C，时间 60 ~ 120sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

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.

/ Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

卷盘包装 / 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
SOT-23	3,000	10	30,000	6	180,000	7" x8	180×120×180	390×385×205

/ Notices