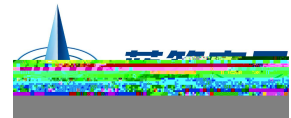


## / Absolute Maximum Ratings(Ta=25 )

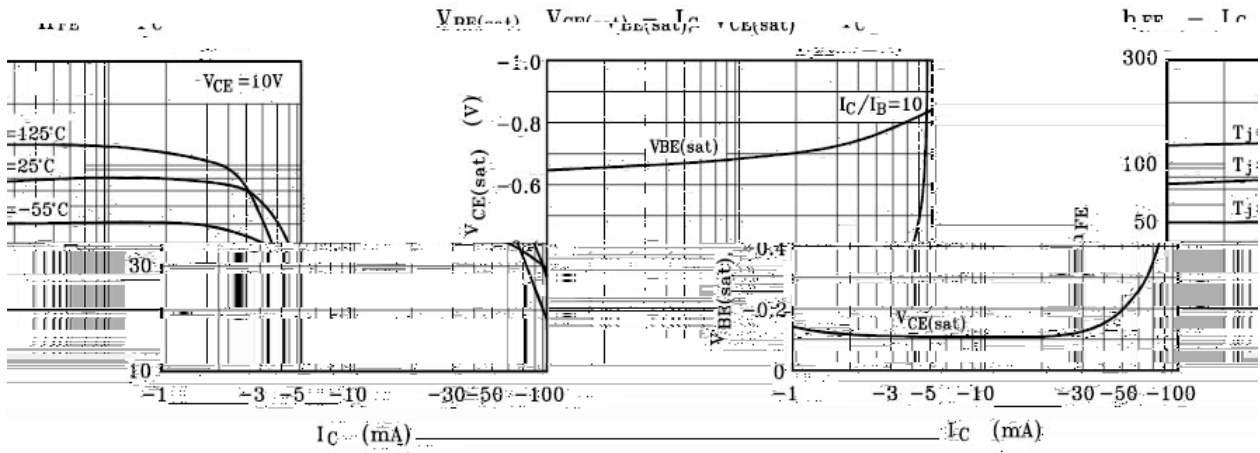
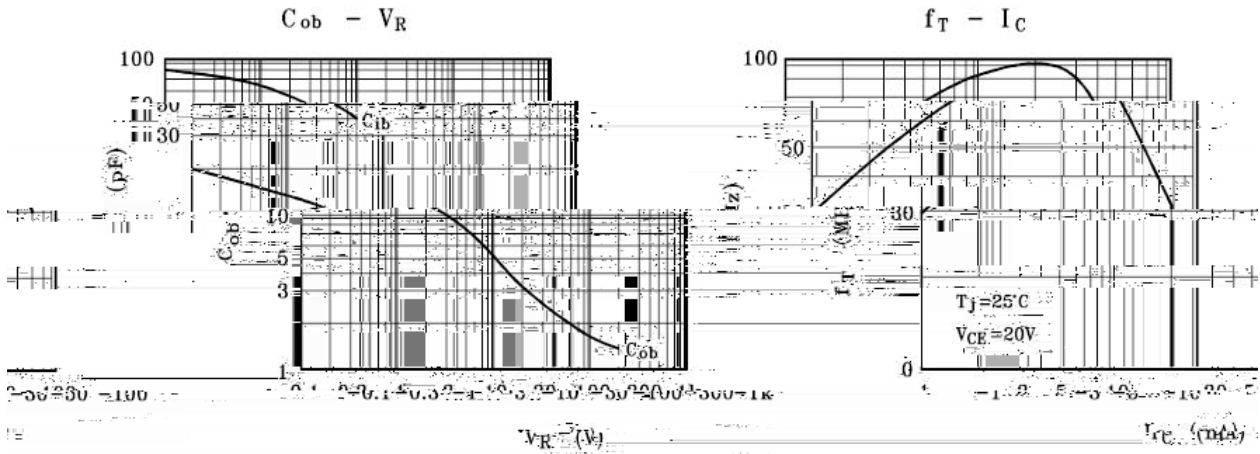
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-300	V
Collector to Emitter Voltage	$V_{CEO}$	-300	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-500	mA
Collector Power Dissipation	$P_C$	350	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

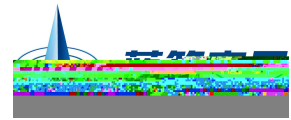
## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=-100\mu A$ $I_E=0$	-300			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=-1.0mA$ $I_B=0$	-300			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=-100\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-200V$ $I_E=0$			-0.25	$\mu A$
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{BE}=-3.0V$ $I_C=0$			-0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10V$ $I_C=-10mA$	40			
	$h_{FE(2)}$	$V_{CE}=-10V$ $I_C=-30mA$	25			
	$h_{FE(3)}$	$V_{CE}=-10V$ $I_C=-1.0mA$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-20mA$ $I_B=-2.0mA$			-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-20mA$ $I_B=-2.0mA$			-0.9	V
Transition Frequency	$f_T$	$I_C=-10mA$ $f=100MHz$ $V_{CE}=-20V$	50			MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-20V$ $f=1.0MHz$ $I_E=0$			6.0	pF



**/ Electrical Characteristic Curve**





**/ Package Dimensions**



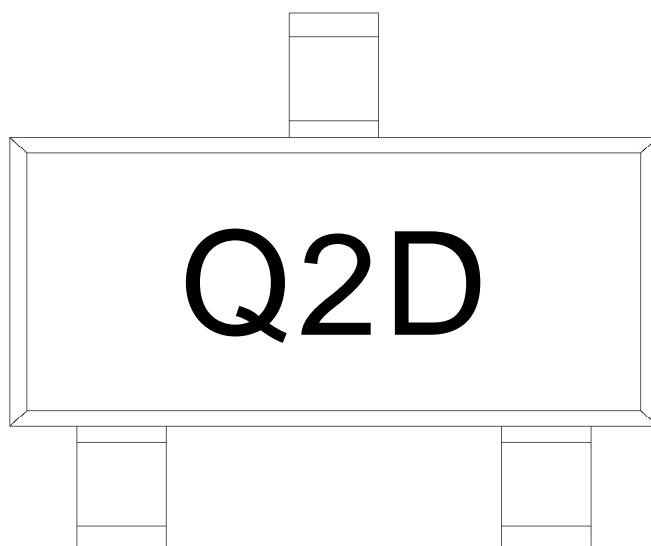
图例

单位



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
1.20			0.45		0.91
2.54			0.65		0.91
3.00			0.65		0.91
3.50			0.65		0.91
4.00			0.65		0.91
4.50			0.65		0.91
5.00			0.65		0.91
5.50			0.65		0.91
6.00			0.65		0.91
6.50			0.65		0.91
7.00			0.65		0.91
7.50			0.65		0.91
8.00			0.65		0.91
8.50			0.65		0.91
9.00			0.65		0.91
9.50			0.65		0.91
10.00			0.65		0.91
10.50			0.65		0.91
11.00			0.65		0.91
11.50			0.65		0.91
12.00			0.65		0.91
12.50			0.65		0.91
13.00			0.65		0.91
13.50			0.65		0.91
14.00			0.65		0.91
14.50			0.65		0.91
15.00			0.65		0.91
15.50			0.65		0.91
16.00			0.65		0.91
16.50			0.65		0.91
17.00			0.65		0.91
17.50			0.65		0.91
18.00			0.65		0.91
18.50			0.65		0.91
19.00			0.65		0.91
19.50			0.65		0.91
20.00			0.65		0.91
20.50			0.65		0.91
21.00			0.65		0.91
21.50			0.65		0.91
22.00			0.65		0.91
22.50			0.65		0.91
23.00			0.65		0.91
23.50			0.65		0.91
24.00			0.65		0.91
24.50			0.65		0.91
25.00			0.65		0.91
25.50			0.65		0.91
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26.50			0.65		0.91
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27.50			0.65		0.91
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32.50			0.65		0.91
33.00			0.65		0.91
33.50			0.65		0.91
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34.50			0.65		0.91
35.00			0.65		0.91
35.50			0.65		0.91
36.00			0.65		0.91
36.50			0.65		0.91
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37.50			0.65		0.91
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38.50			0.65		0.91
39.00			0.65		0.91
39.50			0.65		0.91
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41.50			0.65		0.91
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42.50			0.65		0.91
43.00			0.65		0.91
43.50			0.65		0.91
44.00			0.65		0.91
44.50			0.65		0.91
45.00			0.65		0.91
45.50			0.65		0.91
46.00			0.65		0.91
46.50			0.65		0.91
47.00			0.65		0.91
47.50			0.65		0.91
48.00			0.65		0.91
48.50			0.65		0.91
49.00			0.65		0.91
49.50			0.65		0.91
50.00			0.65		0.91
50.50			0.65		0.91
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55.50			0.65		0.91
56.00			0.65		0.91
56.50			0.65		0.91
57.00			0.65		0.91
57.50			0.65		0.91
58.00			0.65		0.91
58.50			0.65		0.91
59.00			0.65		0.91
59.50			0.65		0.91
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60.50			0.65		0.91
61.00			0.65		0.91
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62.00			0.65		0.91
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63.50			0.65		0.91
64.00			0.65		0.91
64.50			0.65		0.91
65.00			0.65		0.91
65.50			0.65		0.91
66.00			0.65		0.91
66.50			0.65		0.91
67.00			0.65		0.91
67.50			0.65		0.91
68.00			0.65		0.91
68.50			0.65		0.91
69.00			0.65		0.91
69.50			0.65		0.91
70.00			0.65		0.91
70.50			0.65		0.91
71.00			0.65		0.91
71.50			0.65		0.91
72.00			0.65		0.91
72.50			0.65		0.91
73.00			0.65		0.91
73.50			0.65		0.91
74.00			0.65		0.91
74.50			0.65		0.91
75.00			0.65		0.91
75.50			0.65		0.91
76.00			0.65		0.91
76.50			0.65		0.91
77.00			0.65		0.91
77.50			0.65		0.91
78.00			0.65		0.91
78.50			0.65		0.91
79.00			0.65		0.91
79.50			0.65		0.91
80.00			0.65		0.91
80.50			0.65		0.91
81.00			0.65		0.91
81.50			0.65		0.91
82.00			0.65		0.91
82.50			0.65		0.91
83.00			0.65		0.91
83.50			0.65		0.91
84.00			0.65		0.91
84.50			0.65		0.91
85.00			0.65		0.91
85.50			0.65		0.91
86.00			0.65		0.91
86.50			0.65		0.91
87.00			0.65		0.91
87.50			0.65		0.91
88.00			0.65		0.91
88.50			0.65		0.91
89.00			0.65		0.91
89.50			0.65		0.91
90.00			0.65		0.91
90.50			0.65		0.91
91.00			0.65		0.91
91.50			0.65		0.91
92.00			0.65		0.91
92.50			0.65		0.91
93.00			0.65		0.91
93.50			0.65		0.91
94.00			0.65		0.91
94.50			0.65		0.91
95.00			0.65		0.91
95.50			0.65		0.91
96.00			0.65		0.91
96.50			0.65		0.91
97.00			0.65		0.91
97.50			0.65		0.91
98.00			0.65		0.91
98.50			0.65		0.91
99.00			0.65		0.91
99.50			0.65		0.91
100.00			0.65		0.91

**/ Marking Instructions**



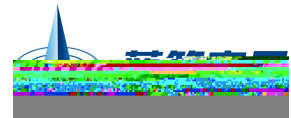
Q

2D

Note:

Q: Automobile halogen-free product Code

2D: Product Type Code.



(   ) / 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	Units					Dimension (unit mm <sup>3</sup> )		
	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	Outer Box