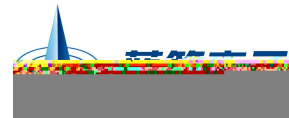


/ Revised record

F	2017-4				
G	2020-11-11	1			
A	2022-4-23	all	BR/Q AEC-Q101 , H Q 245±5°C 5±0.5sec 255±5°C 0.5sec 5±		

BRMMBTA92Q

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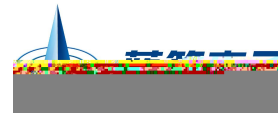


/ Absolute Maximum Ratings(Ta=25)

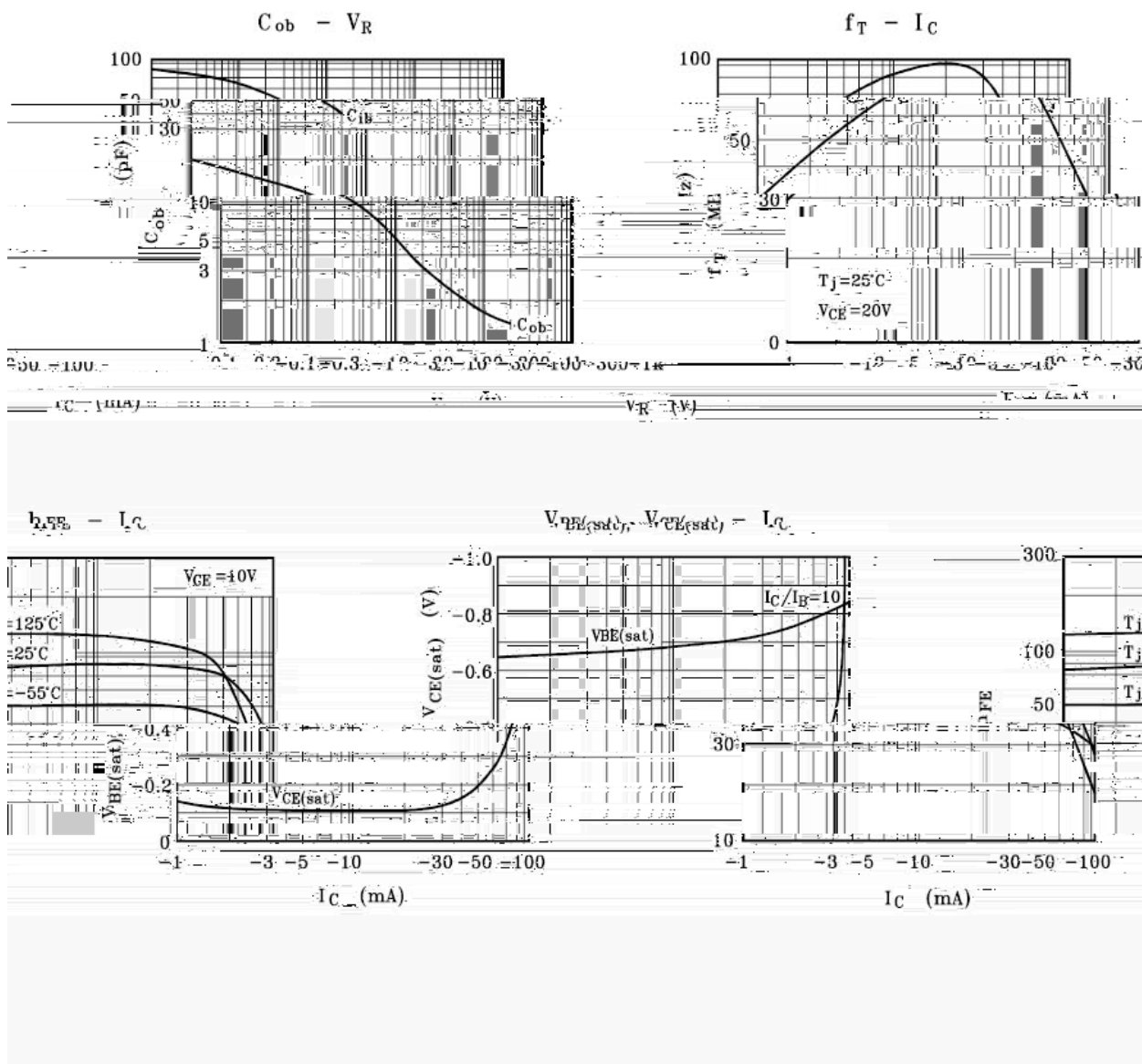
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-300	V
Collector to Emitter Voltage	V_{CEO}	-300	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-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	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{BE} = -3.0V$ $I_C = 0$			-0.1	μA
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

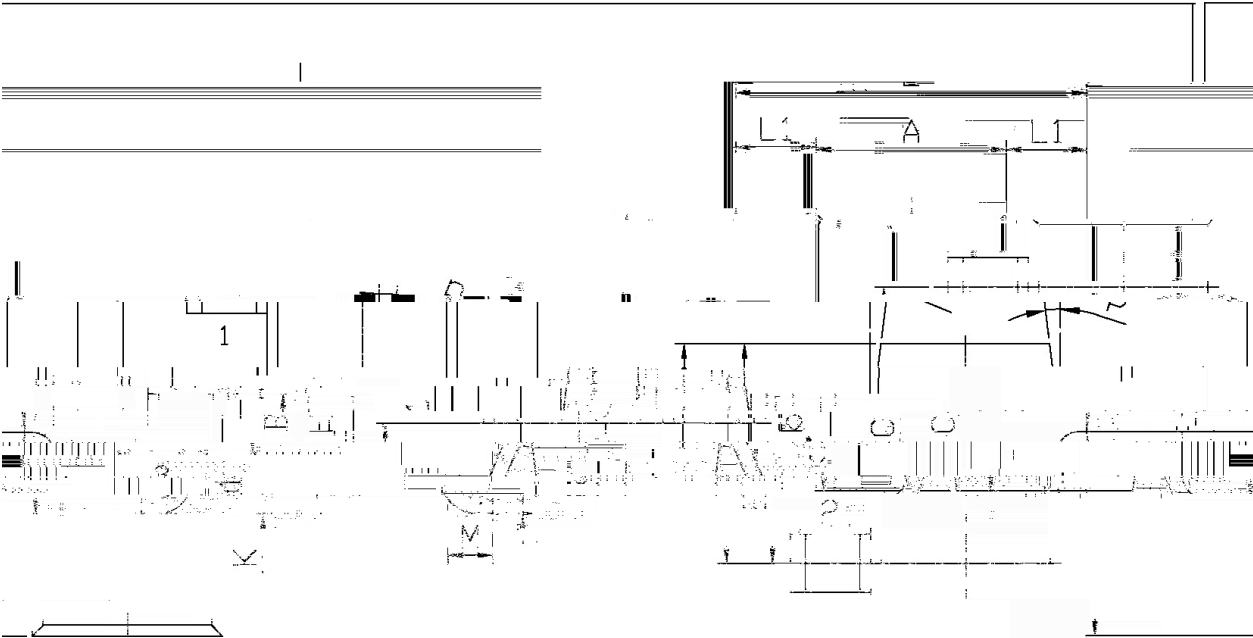


/ Package Dimensions

单位

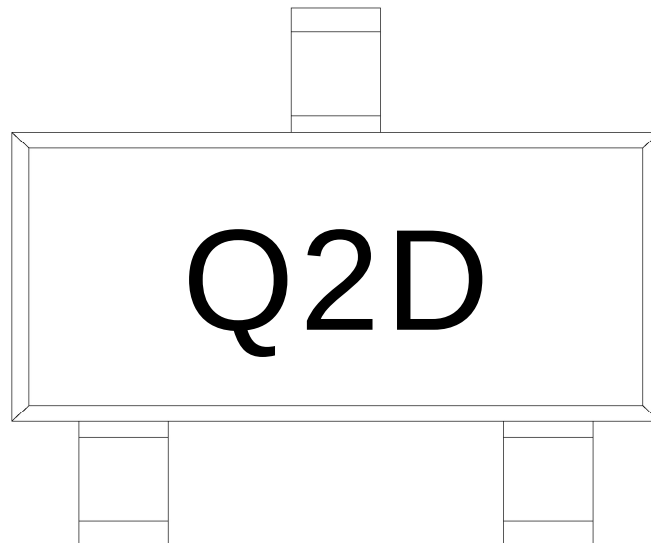
单位

mm



Symbol		Dimensions in mm (inches)		Symbol		Dimensions in mm (inches)	
		Min	Max			Min	Max
1	1.20	0.75	2.75	2	0.25	0.25	0.35
3	1.80	0.75	0.82	5	0.25	0.25	0.35
2, 7C	0.55	0.75	0.75	6	0.25	0.25	0.35
1, 7C	2.53	0.75	0.82	7	0.25	0.25	0.35
3, 8C	1.65	0.75	0.82	8	0.25	0.25	0.35
0, 8C	0.55	0.75	0.82	9	0.25	0.25	0.35

/ Marking Instructions



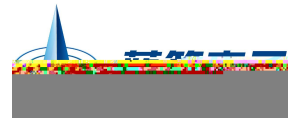
Q

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 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	Outer Box