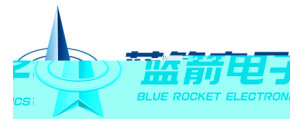


BRM1Q~BRM7Q

Rev.A Nov.-2024



DATA SHEET

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		BRM1Q	BRM2Q	BRM3Q	BRM4Q	BRM5Q	BRM6Q	BRM7Q	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ Fig.1	$I_{F AV}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Peak Forward Surge Current 1.0 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	60							A
I^2t Rating for fusing (3ms≤t≤8.3ms)	I^2t	3.7							A ² S
Typical Junction Capacitance ⁽¹⁾	C_j	7							pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	100 20 25							/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							

Note:

- 1 Measured at 1 MHz and applied reverse voltage of 4 V D.C
- 2 P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating							Unit
			BRM1Q	BRM2Q	BRM3Q	BRM4Q	BRM5Q	BRM6Q	BRM7Q	
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0A$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25$	5							μA
		$T_a=125$	100							μA

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

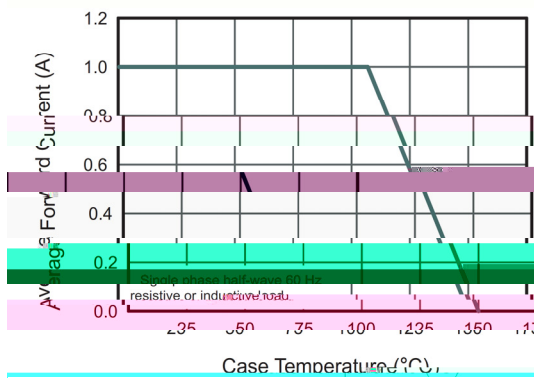


Fig.2 Typical Reverse Characteristics

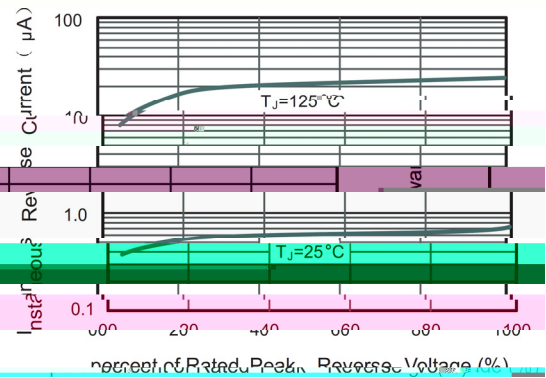


Fig.3 Typical Forward Characteristic

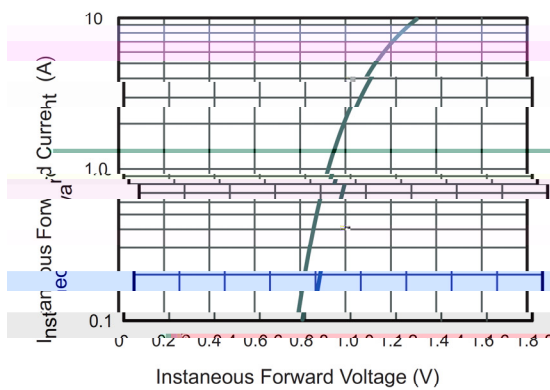


Fig.4 Typical Junction Capacitance

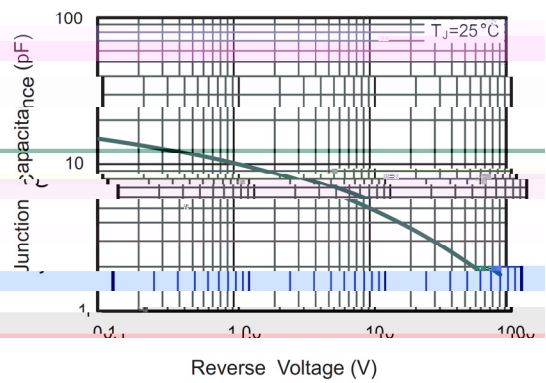
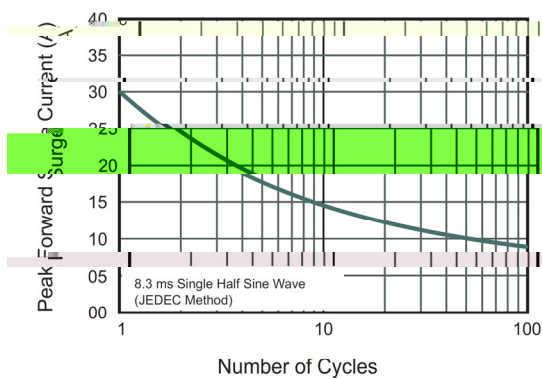
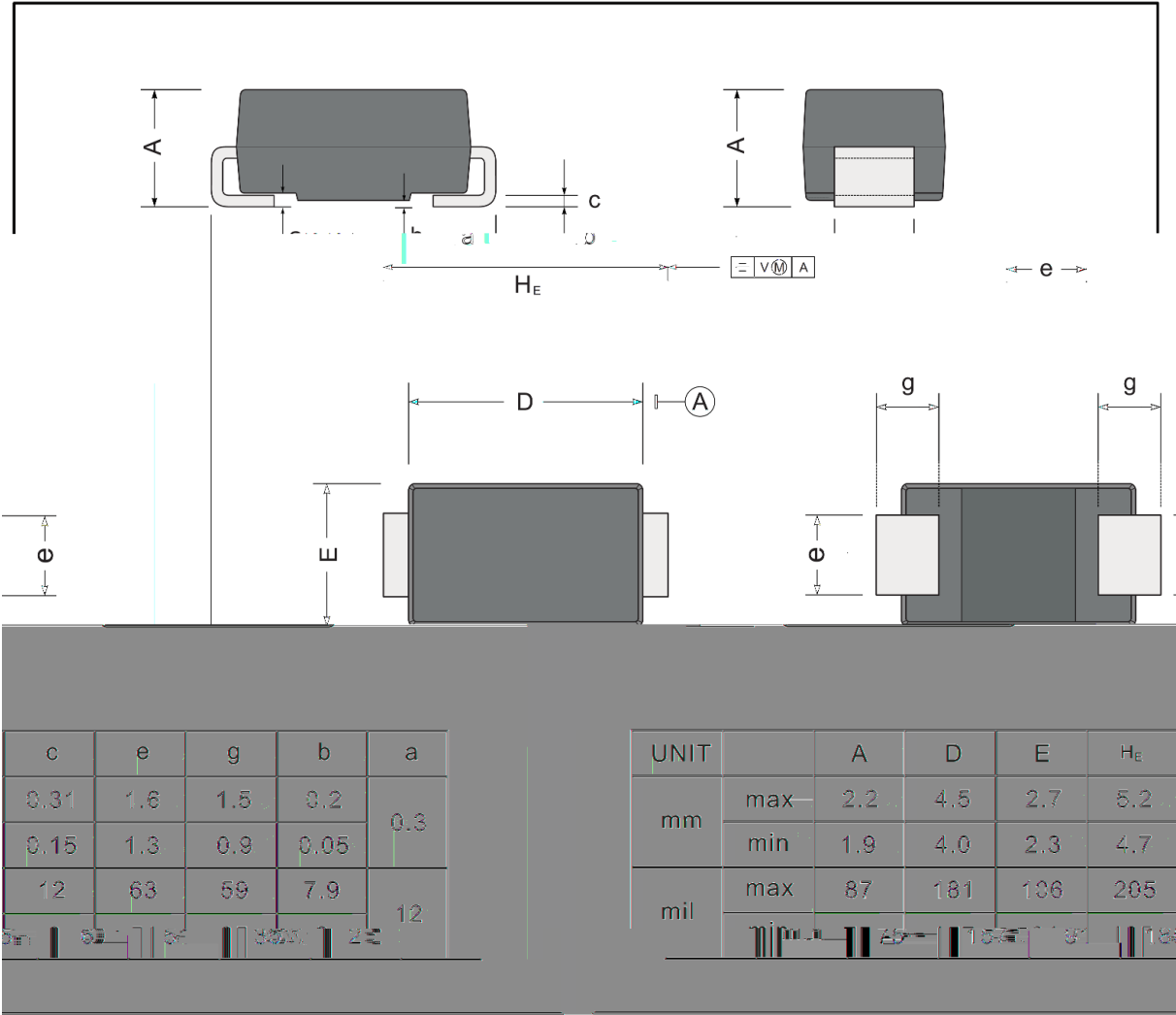


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

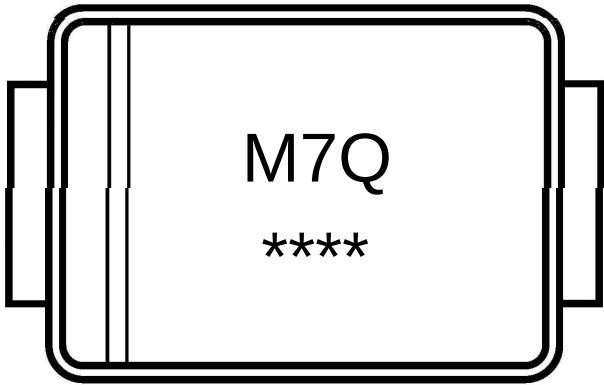


/ Package Dimensions

SMA



/ Marking Instructions



M7
Q

Note:

M7 Product Type Code

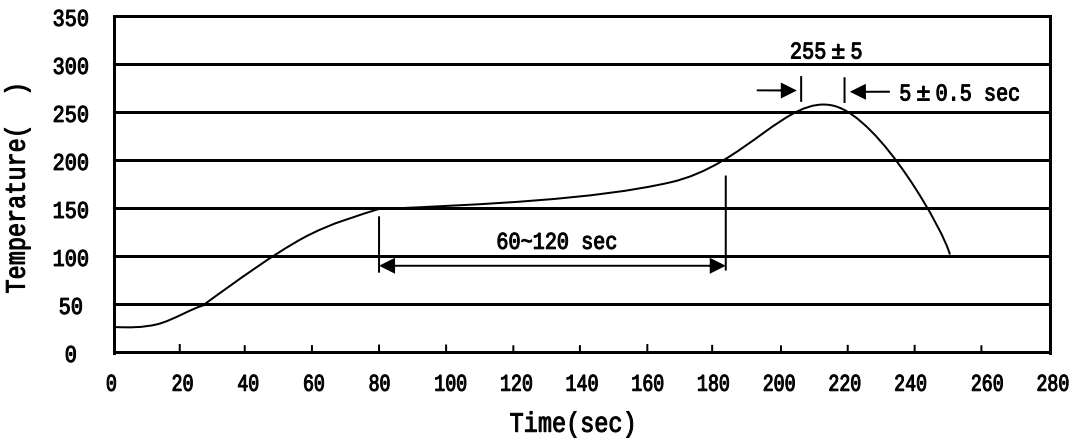
Q: Automobile halogen-free product Code

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

Marking

Type number	Marking code
BRM1Q	M1Q
BRM2Q	M2Q
BRM3Q	M3Q
BRM4Q	M4Q
BRM5Q	M5Q
BRM6Q	M6Q
BRM7Q	M7Q

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



Note:

- 1

150 200

60 120sec;

1.Preheating:150~200 , Time:60~120sec.
- 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

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SMA	5,000	2	10,000	7	70,000	13 ×12	336×336×40	380×335×366

/ Notices