

MA2Q737 (MA737)

Silicon epitaxial planar type

For high-frequency rectification

■ Features

- Forward current (average) $I_{F(AV)}$: 1.5 A type
- Reverse voltage (DC value) V_R : 30 V
- Allowing automatic insertion with the emboss taping

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current ^{*1}	$I_{F(AV)}$	1.5	A
Non-repetitive peak forward surge current ^{*2}	I_{FSM}	60	A
Junction temperature	T_j	-40 to +125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

Note) *1 : With a printed-circuit board (copper foil area 2.5 mm × 2.5 mm
+ 0.8 mm × 20 mm or more on both cathode and anode sides)

*2 : The peak-to-peak value in one cycle of 50 Hz sine-wave
(non-repetitive)

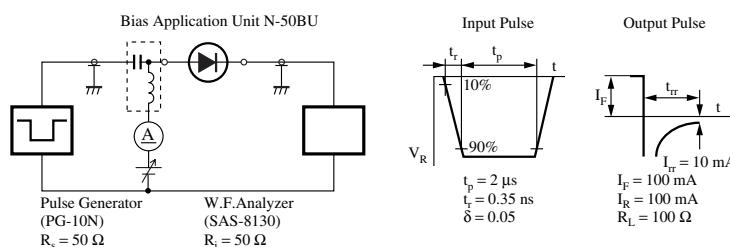
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30 \text{ V}$			1	mA
Forward voltage (DC)	V_F	$I_F = 2 \text{ A}$			0.5	V
Terminal capacitance	C_t	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		70		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100 \text{ mA}$ $I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$			50	ns

Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 20 MHz

3. * : t_{rr} measuring instrument



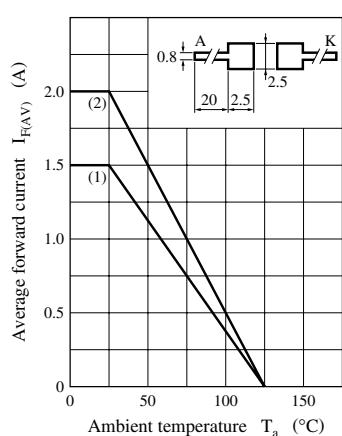
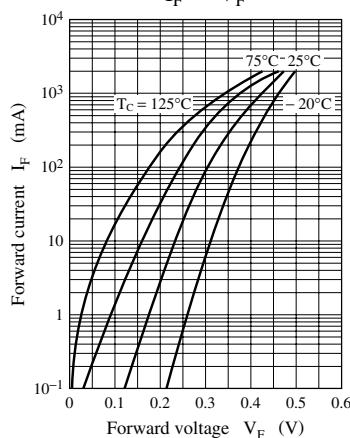
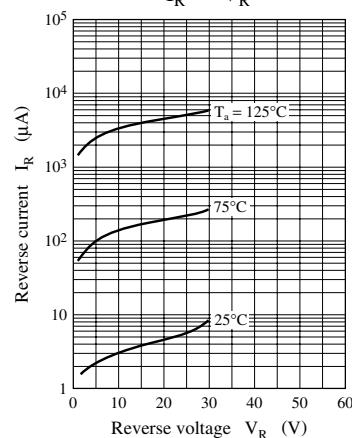
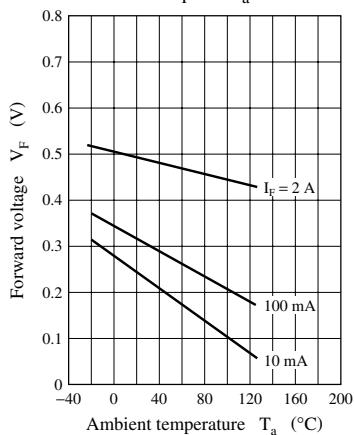
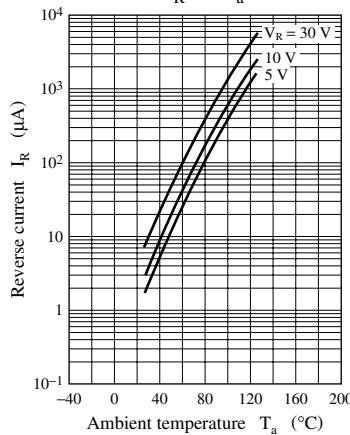
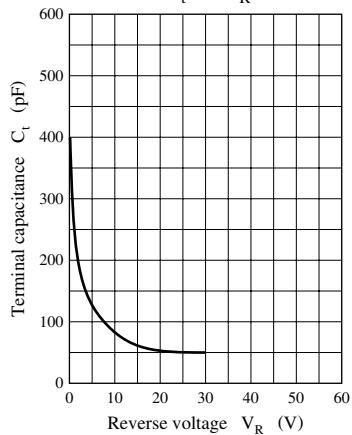
Note) The part number in the parenthesis shows conventional part number.

$I_{F(AV)}$ — T_a

(1) Printed-circuit board: Glass epoxy board

(2) Printed-circuit board: Alumina board

Copper foil for both A and K sides

2.5 mm \times 2.5 mm + 0.8 mm \times 20 mm $I_F — V_F$  $I_R — V_R$  $V_F — T_a$  $I_R — T_a$  $C_t — V_R$ 

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