

# MA2Q738

## Silicon epitaxial planar type

For high-frequency rectification

### ■ Features

- Forward current (average)  $I_{F(AV)}$ : 1.5 A type
- Reverse voltage (DC value)  $V_R$ : 40 V
- Allowing automatic insertion with the emboss taping

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	40	V
Repetitive peak reverse voltage	$V_{RRM}$	40	V
Average forward current* <sup>1</sup>	$I_{F(AV)}$	1.5	A
Non-repetitive peak forward surge current* <sup>2</sup>	$I_{FSM}$	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  $2.5\text{ mm} \times 2.5\text{ mm}$  +  $0.8\text{ mm} \times 20\text{ mm}$  or more on both cathode and anode sides)

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

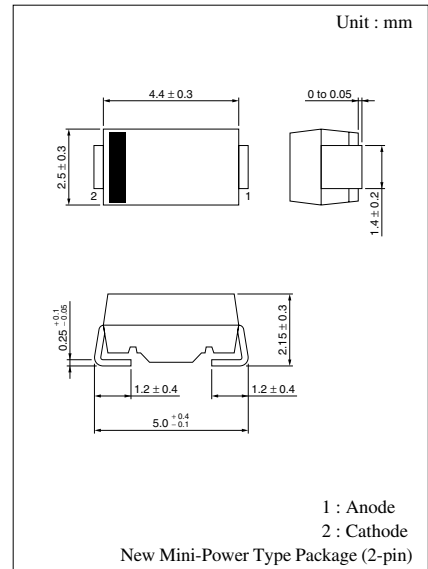
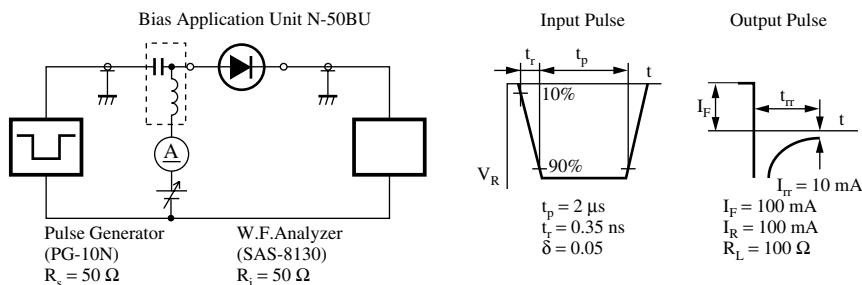
### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 40\text{ V}$			2	mA
Forward voltage (DC)	$V_F$	$I_F = 2\text{ A}$			0.55	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



Marking Symbol: PD

$$I_{F(AV)} - T_a$$

- (1) Printed-circuit board: Glass epoxy board
  - (2) Printed-circuit board: Alumina board
- Copper foil for both A and K sides  
2.5 mm × 2.5 mm + 0.8 mm × 20 mm

