

# MA2Q738 (MA738)

## Silicon epitaxial planar type

For high frequency rectification

### ■ Features

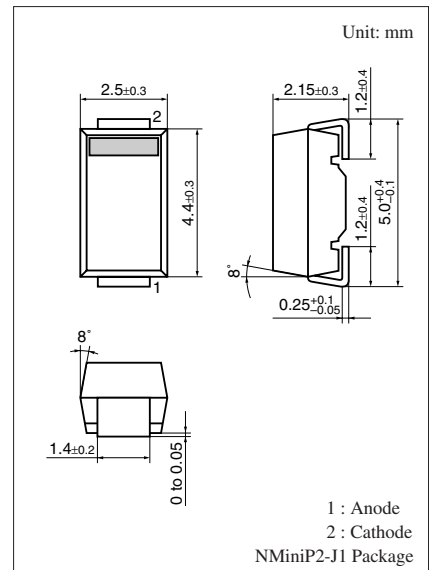
- Forward current (Average)  $I_{F(AV)} = 1.5$  A rectification is possible
- Reverse voltage  $V_R = 40$  V is guaranteed
- Automatic insertion with the emboss taping is possible

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	40	V
Repetitive peak reverse voltage	$V_{RRM}$	40	V
Forward current (Average) *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: Mounted on the printed circuit board (glass epoxy board)

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



Marking Symbol: PD

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

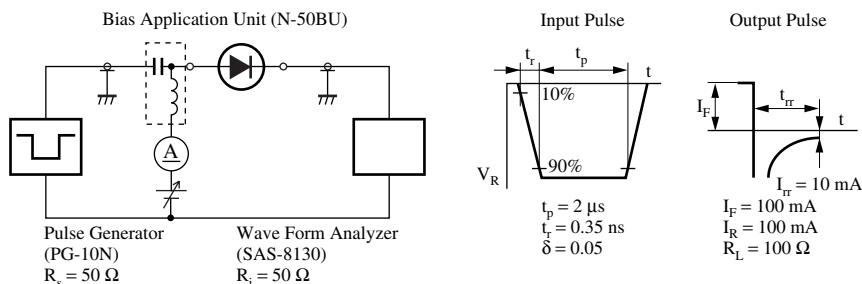
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 2.0$ A			0.55	V
Reverse current	$I_R$	$V_R = 40$ V			2	mA
Terminal capacitance	$C_t$	$V_R = 10$ V, $f = 1$ MHz		70		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ $\Omega$			50	ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

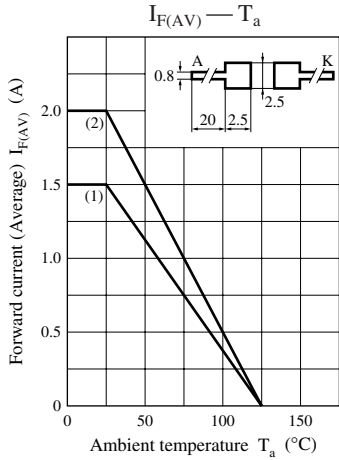
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 20 MHz.

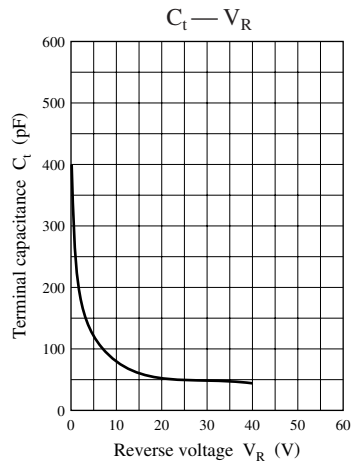
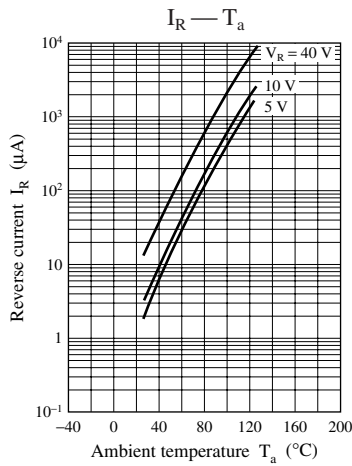
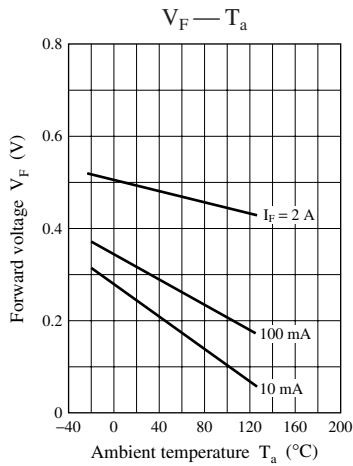
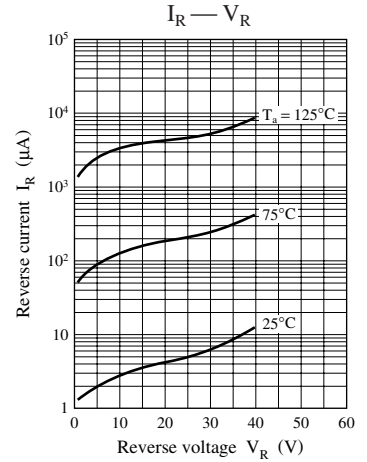
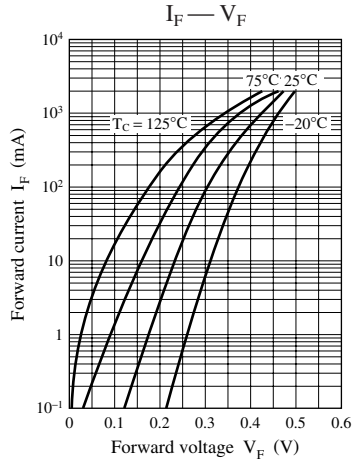
4. \*:  $t_{rr}$  measurement circuit



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



(1) Printed circuit board: Glass Epoxy PC board  
 (2) Printed circuit board: Alumina PC board  
 Copper foil: Both A and K sides  
 2.5 mm × 2.5 mm + 0.8 mm × 20 mm



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