

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)

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

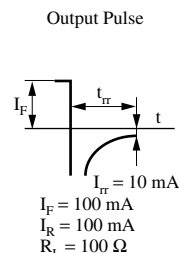
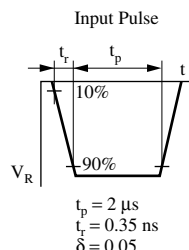
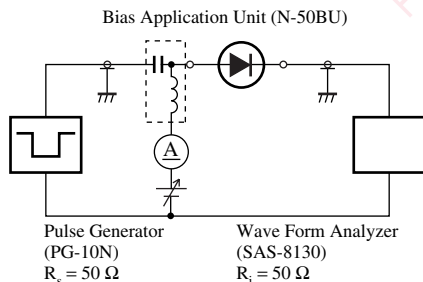
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 2.0$ A			0.55	V
Reverse current	I_R	$V_R = 40$ V			2	mA
Terminal capacitance	C_t	$V_R = 10$ V, $f = 1$ MHz		70		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100 \Omega$			50	ns

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

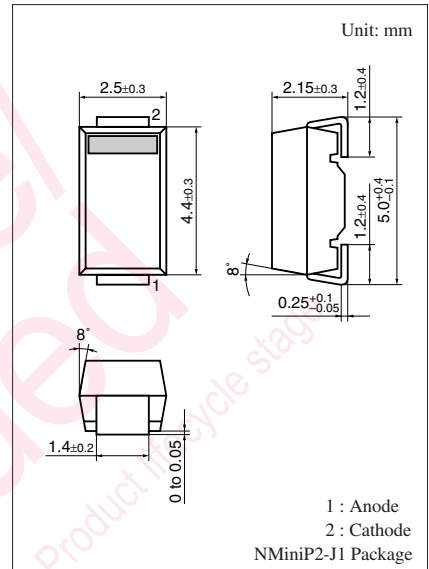
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

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

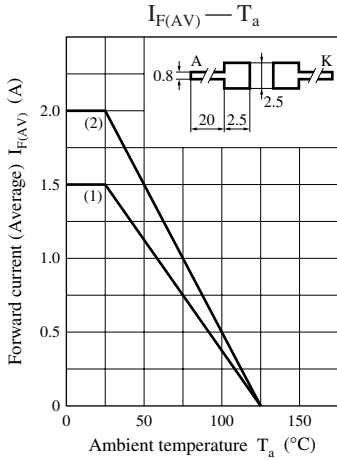
4. *: t_{rr} measurement circuit



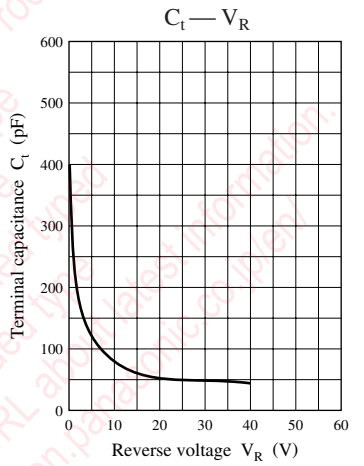
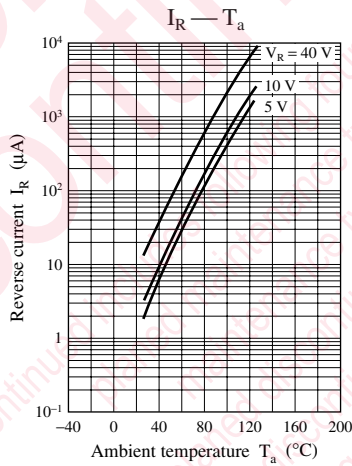
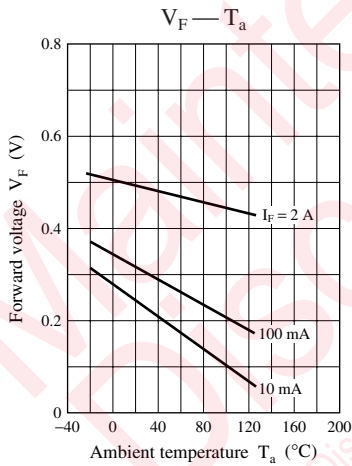
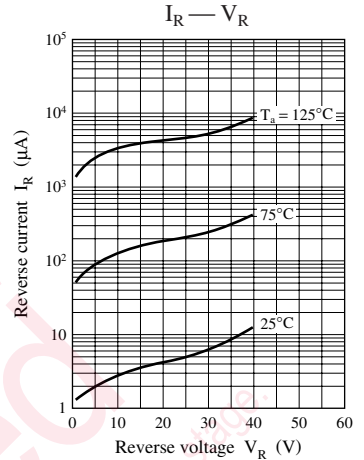
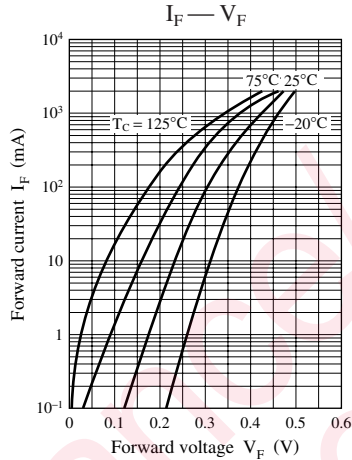
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: PD



(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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