# **MA2Q739** (MA739)

## Silicon epitaxial planar type

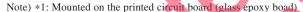
For high frequency rectification

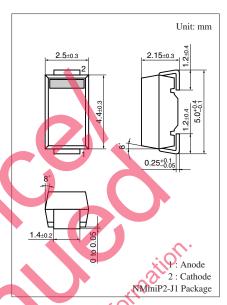
#### ■ Features

- Forward current (Average)  $I_{F(AV)} = 0.7$  A rectification is possible
- Reverse voltage  $V_R = 90 \text{ V}$  is guaranteed
- Automatic insertion with the emboss taping is possible

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Reverse voltage	$V_R$	90	V	
Maximum peak reverse voltage	$V_{RM}$	90	y	
Forward current (Average) *1	$I_{F(AV)}$	0.7	A	
Non-repetitive peak forward surge current *2	$I_{FSM}$	10	A	
Junction temperature	T <sub>j</sub>	-40 to +125	°C	
Storage temperature	T <sub>stg</sub>	-40 to +125	°C	



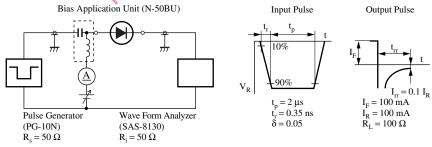


Marking Symbol: PE

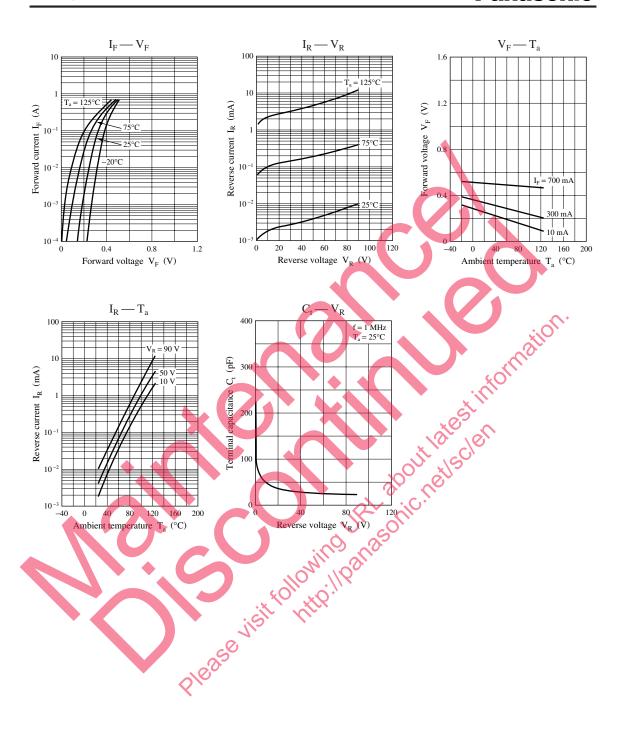
#### ■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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Junction temperature	T <sub>j</sub>	-40 to +125	°C	Marking Symbol: PE							
Storage temperature	T <sub>stg</sub> -40 to +125 °C										
Note) *1: Mounted on the printe	d circuit board	(glass epoxy	boad)		XO.	0					
*2: The peak-to-peak value in	one cycle of 50 I	Iz sine wave (1	non-repetitive)	X		Q,					
<b>♦ ♦</b>				Olle	1/50						
Storage temperature  T <sub>stg</sub> 40 to +125  C  Note) *1: Mounted on the printed circuit board (glass epoxy boad)  *2: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)											
■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$											
Parameter	Symbo	ol l	Conditions	Allo	Min	Тур	Max	Unit			
Forward voltage	$V_F$ $I_F = 0.7 \text{ A}$				0.8	V					
Reverse current	$I_R$ $V_R = 90 \text{ V}^{\circ}$				1.0	mA					
Terminal capacitance	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$			50		pF					
Reverse recovery time *	t <sub>rr</sub>		$\chi = 100 \text{ mA}$				100	ns			
		$I_{rr} = 0$	$.1 \mathbf{I}_{\mathbf{R}} \mathbf{R}_{\mathbf{L}} = 100 \Omega$								

- 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 10 MHz
  - 4. \*: t<sub>rr</sub> measurement circuit



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



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