# MA2Q705 (MA10705)

### Silicon epitaxial planar type

For high frequency rectification

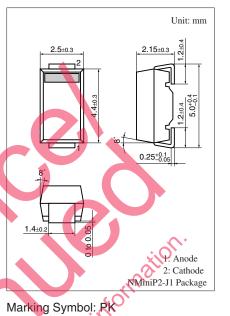
#### Features

• Forward current (Average)  $I_{F(AV)} = 1.5$  A rectification is possible

Absolute Maximum Ratings  $T = 25^{\circ}C$ 

• Low forward voltage:  $V_F < 0.37 V$ 

ADSOLUTE MAXIMUM Ratings $T_a = 25 \text{ C}$								
Parameter	Symbol	Rating	Unit					
Reverse voltage	V <sub>R</sub>	30	V					
Repetitive peak reverse voltage	V <sub>RRM</sub>	30	V					
Forward current (Average) *1	I <sub>F(AV)</sub>	1.5	A					
Non-repetitive peak forward surge current *2	I <sub>FSM</sub>	30	A					
Junction temperature	Tj	-40 to +125	°C					
Storage temperature	T <sub>stg</sub>	-40 to +125	°C					



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

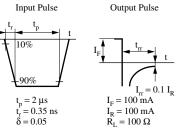
Storage temperature	T <sub>stg</sub> -40	to +125	°C	Symbol	S.					
Note) *1: Mounted on the printed circuit board (glass epoxy board)										
*2: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)										
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Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$										
Parameter	Symbol		Conditions	Min	Тур	Max	Unit			
Forward voltage	V <sub>F</sub>	$I_{\rm F} = 1.0$	A			0.37	V			
Reverse current	$I_R$ $V_R = 30 V$				3	mA				
Terminal capacitance	Ct	$V_{R} = 10$	$\mathbf{V}, \mathbf{f} = \mathbf{J} \mathbf{M} \mathbf{H} \mathbf{z}$		90		pF			
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R =$	: 100 mA			50	ns			
		$I_{rr} = 0.1$	$I_R, R_L = 100 \Omega$							

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.

V<sub>R</sub>

- 3. Absolute frequency of input and output is 20 MHz.
  - Bias Application Unit (N-50BU)  $\frac{1}{m}$  $\frac{1}{2}$ Pulse Generator Wave Form Analyzer (PG-10N) (SAS-8130)  $R_s = 50 \Omega$  $R_i = 50 \Omega$
- 4. \*: trr measurement circuit



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

## **Panasonic**



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