

# MA2Q705 (MA10705)

## Silicon epitaxial planar type

For high frequency rectification

### ■ Features

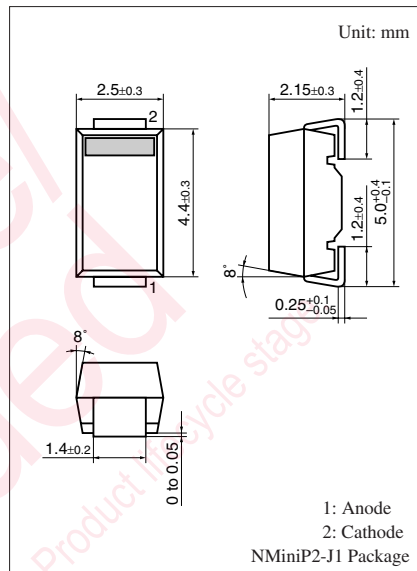
- Forward current (Average)  $I_{F(AV)} = 1.5$  A rectification is possible
- Low forward voltage:  $V_F < 0.37$  V

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current (Average) *1	$I_{F(AV)}$	1.5	A
Non-repetitive peak forward surge current *2	$I_{FSM}$	30	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: PK

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

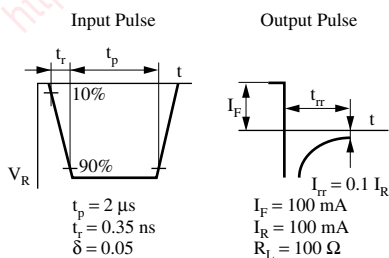
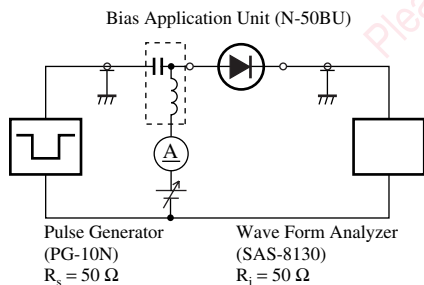
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 1.0$ A			0.37	V
Reverse current	$I_R$	$V_R = 30$ V			3	mA
Terminal capacitance	$C_t$	$V_R = 10$ V, $f = 1$ MHz		90		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{tr} = 0.1 I_R$ , $R_L = 100 \Omega$			50	ns

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

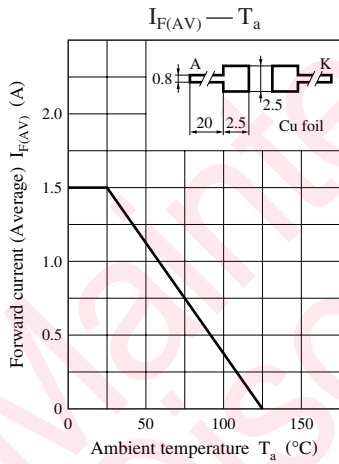
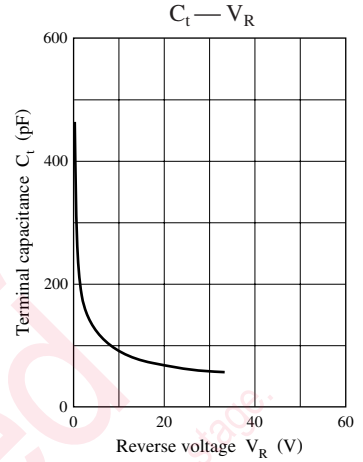
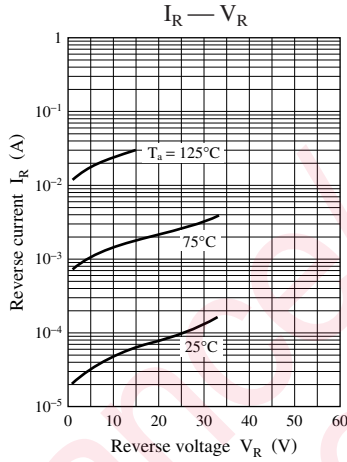
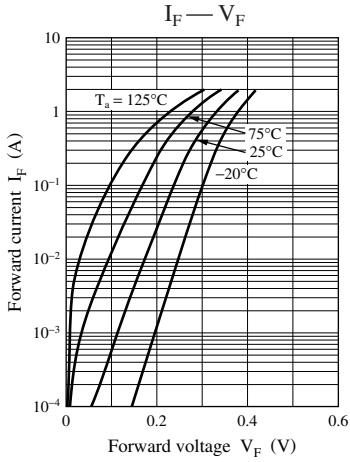
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

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.



Maintenance/Discontinued includes following four Product lifecycle stages:  
 planned maintenance type  
 maintenance type  
 planned discontinued type  
 discontinued type  
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