# MA24F41

Silicon epitaxial planar type

#### For high speed switching circuits

#### Features

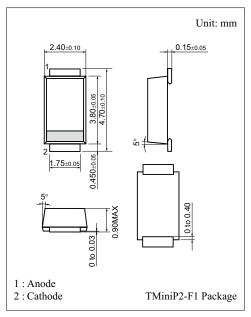
- Super high speed switching characteristic ( $t_{rr} = 15$  nsec typ.)
- At the same time as lowering the wiring inductance and increasing the peak surge forward current, the resistance to surge damage at power on has been increased by adopting clip connection package (TMP).

Absolute Maximum Ratings	$T_a = 25^{\circ}C$
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Parameter	Symbol	Rating	Unit	
Repetitive peak reverse voltage	V <sub>RRM</sub>	400	V	
Non-repetitive peak reverse surge voltage	V <sub>RSM</sub> 400		V	
Forward current *1	I <sub>F</sub>	1.0	А	
Non-repetitive peak forward surge current *2	I <sub>FSM</sub> 20		А	
Junction temperature	Tj	-40 to +150	°C	
Storage temperature	T <sub>stg</sub>	-40 to +150	°C	

Note) \*1: Mounted on an alumina PC board

\*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)



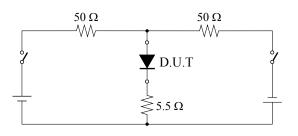
Marking Symbol: G2

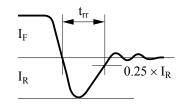
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$								
Parameter	Symbol	Conditions	Min	Тур	Max	Unit		
Forward voltage	V <sub>F</sub>	$I_F = 800 \text{ mA}$		1.0	1.3	v		
Reverse current	I <sub>RRM</sub>	$V_{\text{RRM}} = 400 \text{ V}$			20	μΑ		
Terminal capacitance	Ct	$V_{\rm R} = 0$ V, f = 1 MHz		30		pF		
Reverse recovery time *	t <sub>rr</sub>	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}$ $I_{rr} = 0.25 \text{ A}$		15	45	ns		

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

2. Absolute frequency of input and output is 10 MHz.

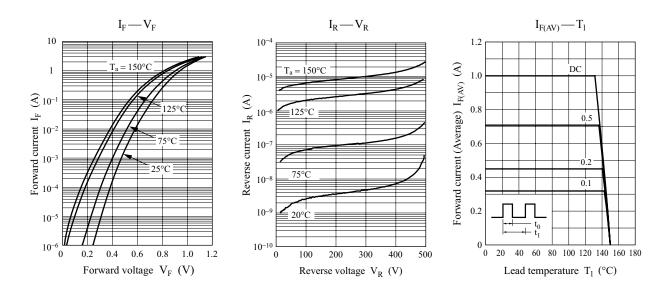
3. \*: t<sub>rr</sub> measurement circuit





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### **Panasonic**



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