# MA3DF40

## Silicon Mesa type

### For high frequency rectification For plasma display panel drive

### Features

- High switching speed t<sub>rr</sub>
- Soft recovery

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

Parameter		Symbol	Rating	Unit	
Repetitive peak reverse voltage		V <sub>RRM</sub>	370	V	
Non-repetitive peak reverse surge voltage		V <sub>RSM</sub>	430	V	
Forward current	$T_C = 25^{\circ}C$	I <sub>F</sub>	20	А	
Non-repetitive peak forward surge current*		I <sub>FSM</sub>	100	А	
Junction temperature		Tj	-40 to +150	°C	
Storage temperature		T <sub>stg</sub>	-40 to +150	°C	

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

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



- 3: Anode
- Marking Symbol: MA3DF40

#### Internal Connection

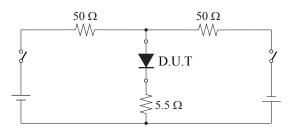


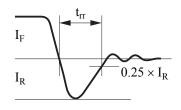
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 20 \text{ mA}$		1.2	1.4	V
Reverse current	I <sub>RRM</sub>	V <sub>RRM</sub> = 370 V			10	μΑ
Reverse recovery time *	t <sub>rr</sub>	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}$ $I_{rr} = 0.25 \text{ A}$		20	35	ns
Thermal resistance (j-a)	R <sub>th(j-c)</sub>				3.0	°C/W
Thermal resistance (j-c)	R <sub>th(j-a)</sub>				63	°C/W

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.

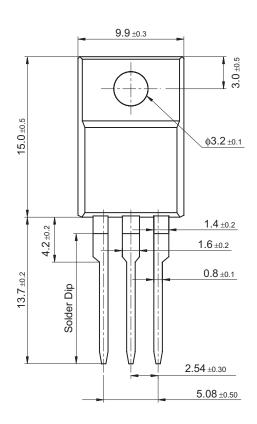
3. \*:  $t_{rr}$  measurement circuit

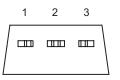


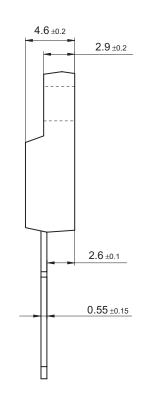


## TO-220D-A1

Unit: mm







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