

MA2D601

Silicon planar type

For high-frequency rectification

For Snubber circuit of power supplies

For secondary side rectification for a power supply

■ Features

- High reverse voltage $V_R > 600$ V
- Short reverse recovery time $t_{rr} < 50$ nsec
- TO-220D (Full-pack package) with high dielectric breakdown voltage > 5.0 kV

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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	600	V
Non-repetitive peak reverse surge voltage	V_{RSM}	600	V
Average forward current	$I_{F(AV)}$	5.0	A
Non-repetitive peak forward surge current*	I_{FSM}	50	A
Junction temperature	T_j	-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

Note) * : The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Repetitive peak reverse current	I_{RRM1}	$V_{RRM} = 600$ V, $T_C = 25^\circ\text{C}$			100	μA
	I_{RRM2}	$V_{RRM} = 600$ V, $T_j = 150^\circ\text{C}$			500	μA
Forward voltage (DC)	V_F	$I_F = 5.0$ A, $T_C = 25^\circ\text{C}$			1.5	V
Reverse recovery time*	t_{rr}	$I_F = 1$ A, $I_R = 1$ A			50	ns
Thermal resistance	$R_{th(j-c)}$				3.0	$^\circ\text{C}/\text{W}$
	$R_{th(j-a)}$				63	$^\circ\text{C}/\text{W}$

- Note) 1. Rated input/output frequency: 10 MHz
 2. Tightening torque-max. 8 kg \times cm
 3. * : t_{rr} measuring circuit



