

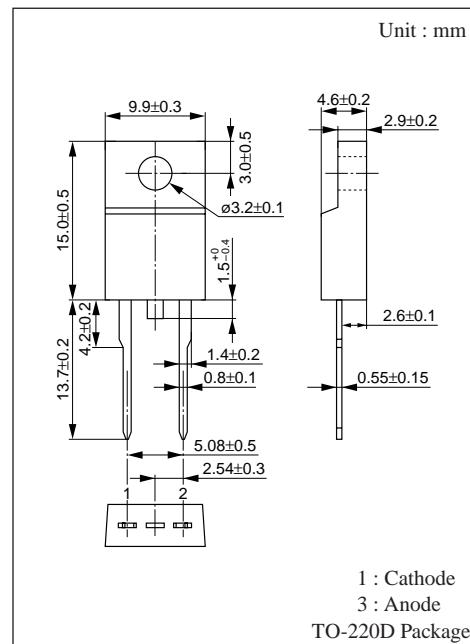
MA6D91

Silicon planer type

For high-frequency rectification

■ Features

- Low forward voltage V_F
- Fast reverse recovery time t_{rr}
- TO-220D (full-pack package) with high dielectric strength > 5.0kV
- Lead end to be V cut for easy mounting



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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	V
Non-repetitive peak reverse voltage	V_{RSM}	200	V
Average forward current	$I_{F(AV)}$	10	A
Non-repetitive peak forward surge current	I_{FSM}	70	A
Junction temperature	T_j	-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Repetitive peak reverse current	I_{RRM1}	$V_{RRM} = 200\text{V}, T_C = 25^\circ\text{C}$			100	μA
	I_{RRM2}	$V_{RRM} = 200\text{V}, T_j = 150^\circ\text{C}$			10	mA
Forward voltage (DC)	V_F	$I_F = 10\text{A}, T_C = 25^\circ\text{C}$			1.00	V
Reverse recovery time	t_{rr}^*	$I_F = 1\text{A}, I_R = 1\text{A}$			100	ns
Thermal resistance	$R_{th(j-c)}$				3	$^\circ\text{C/W}$
	$R_{th(j-a)}$				63	$^\circ\text{C/W}$

Note 1. Rated input/output frequency : 10MHz

2. Tightening torque-max 8kg/cm

3. * t_{rr} measuring circuit

