MA3D690 (MA6D90)

Silicon planar type

For high-frequency rectification

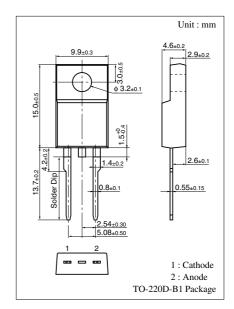
■ Features

- Low forward rise voltage V_F
- Fast reverse recovery time t_{rr}
- \bullet TO-220D (Full-pack package) with high dielectric breakdown voltage $> 5.0~\rm{kV}$
- Easy-to-mount, caused by its V cut lead end

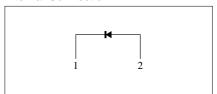
■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}	200	V
Non-repetitive peak reverse surge voltage	V _{RSM}	200	V
Average forward current	I _{F(AV)}	5	A
Non-repetitive peak forward surge current*	I _{FSM}	30	A
Junction temperature	T _j	-40 to +150	°C
Storage temperature	T _{stg}	-40 to +150	°C

Note) * : Half sine-wave; 10 ms/cycle





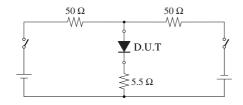


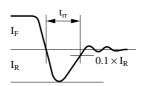
■ Electrical Characteristics $T_a = 25$ °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Repetitive peak reverse current	I_{RRM1}	$V_{RRM} = 200 \text{ V}, T_{C} = 25^{\circ}\text{C}$			20	μΑ
	I _{RRM2}	$V_{RRM} = 200 \text{ V}, T_j = 150^{\circ}\text{C}$			2	mA
Forward voltage (DC)	V_F	$I_F = 5 \text{ A}, T_C = 25^{\circ}\text{C}$			0.98	V
Reverse recovery time*	t _{rr}	$I_F = 1 A, I_R = 1 A$			45	ns
Thermal resistance	R _{th(j-c)}				3	°C/W
	R _{th(j-a)}				63	°C/W

Note) 1. Rated input/output frequency: 10 MHz

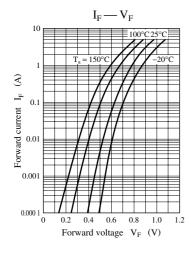
- 2. Tightening torque-max. $8 \text{ kg} \times \text{cm}$
- 3. *: t_{rr} measuring circuit

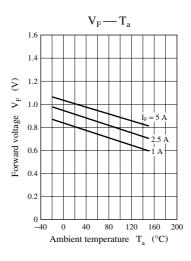


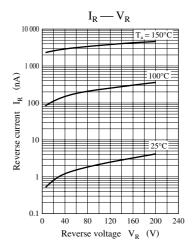


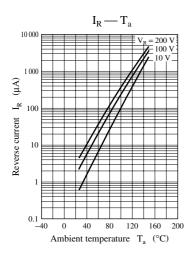
Note) The part number in the parenthesis shows conventional part number.

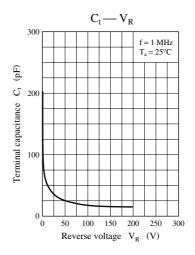
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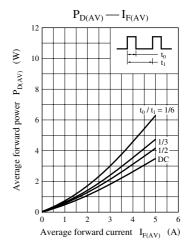


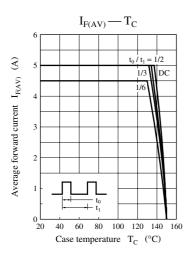












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