

MA691

Silicon Planar Type

Switching

■ Features

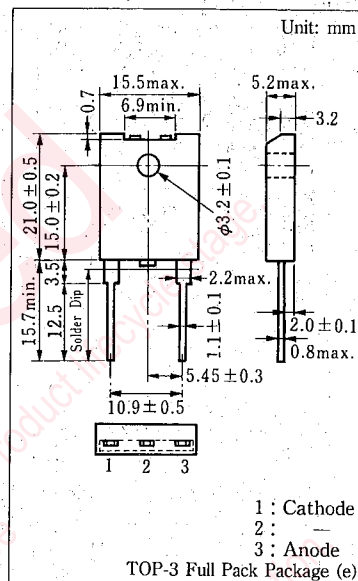
- High V_R
- Low V_F
- Fast t_{rr}

■ Absolute Maximum Ratings (Ta=25°C)

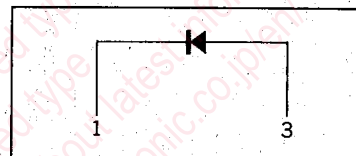
Item	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	200	V
Average Forward Current	$I_{F(AV)}$	10	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}^*	70	A
Junction temperature	T_j	-40 ~ +150	°C
Storage Temperature	T_{stg}	-40 ~ +150	°C

*Sine half wave: 10ms/1~

■ Package Dimensions



■ Inner Circuit

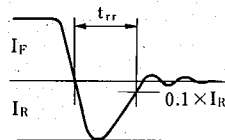
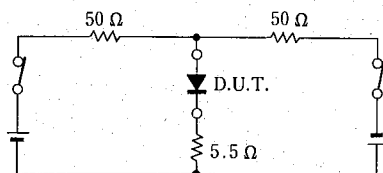


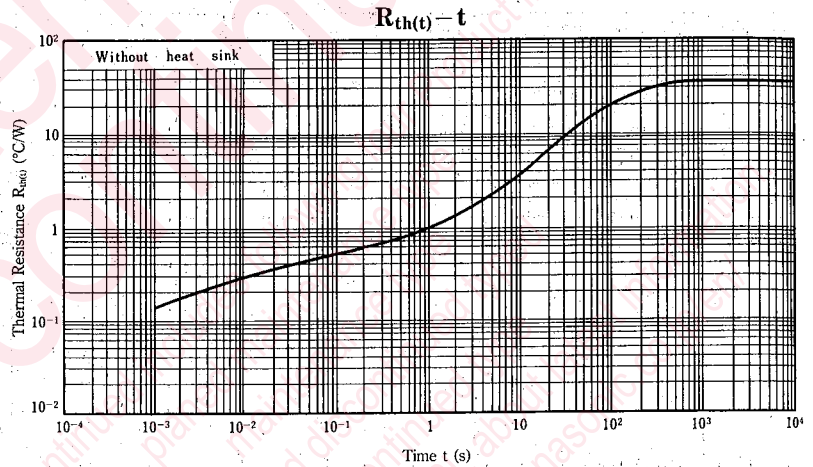
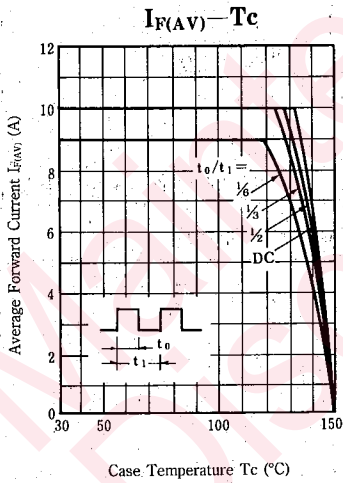
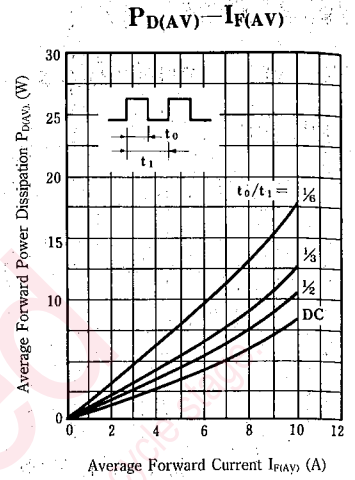
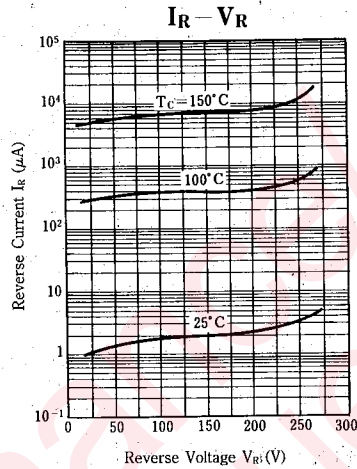
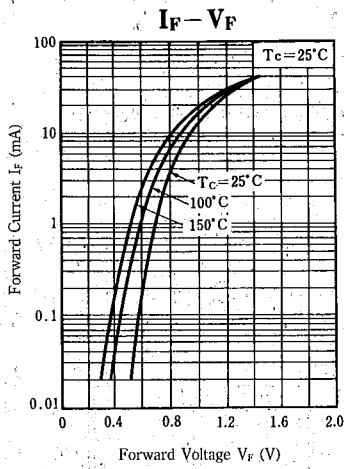
■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Forward Voltage (DC)	V_F	$I_F=10\text{ A}$, $T_C=25\text{ °C}$			1	V
Repetitive Peak Reverse Current	I_{RRM1}	$V_{RRM}=200\text{ V}$, $T_C=25\text{ °C}$			100	μA
	I_{RRM2}	$V_{RRM}=200\text{ V}$, $T_j=150\text{ °C}$			10	mA
Reverse Recovery Time	t_{rr}^*	$I_F=1\text{ A}$, $I_R=1\text{ A}$			100	ns
Thermal Resistance	$R_{th(j-c)}$	Smoothing (CD) between junction and case			2	°C/W
	$R_{th(j-a)}$				40	°C/W

© Input and output frequency of ratings: 10MHz

* t_{rr} measuring circuit





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