

MA749, MA749A

Silicon epitaxial planer type (cathode common)

For switching power supply

■ Features

- Forward current (average) $I_{F(AV)}$: 5A type
- Sealed in TO-220F full-pack package, with high reliability
- Cathode common dual type
- Low forward voltage V_F

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	MA749	40	V
	MA749A	45	
Average forward current	$I_{F(AV)}$	5	mA
Non-repetitive peak forward surge current	I_{FSM}^*	90	A
Junction temperature	T_j	- 40 to +125	°C
Storage temperature	T_{stg}	- 40 to +125	°C

* Sine half wave : 10ms/cycle

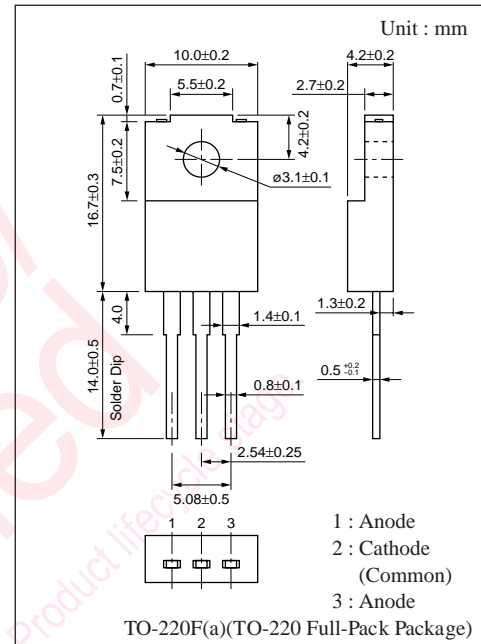
■ Electrical Characteristics (Ta= 25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	MA749	$V_R = 40V$			1	mA
	MA749A	$V_R = 45V$			1	
Forward voltage (DC)	V_F	$I_F = 2.5A$			0.55	V
Thermal resistance	$R_{th(j-c)}$	Flat direct current between junction and case			3	°C/W

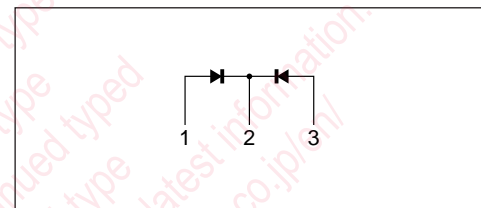
❖ Rated input/output frequency : 200MHz

■ Marking

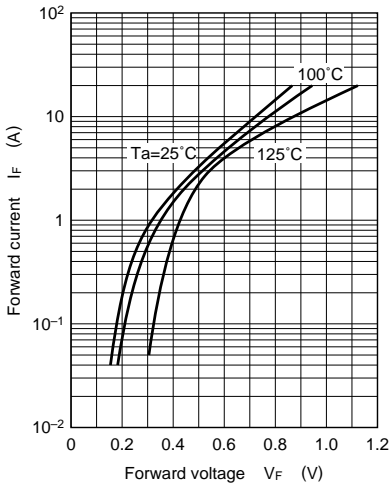
Part Number	MA749	MA749A
Symbol	MA749	MA749A



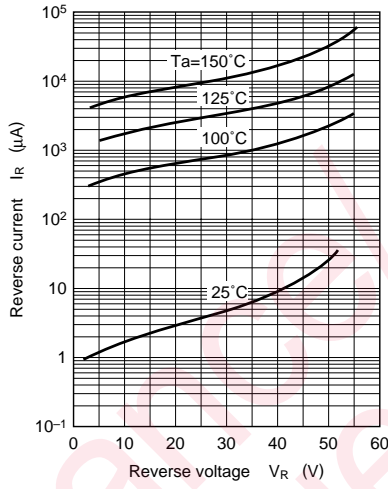
■ Internal Connection



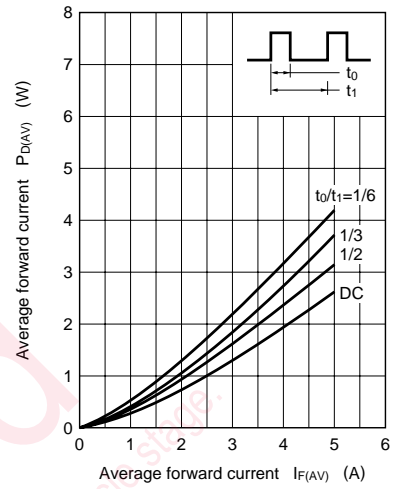
$I_F - V_F$



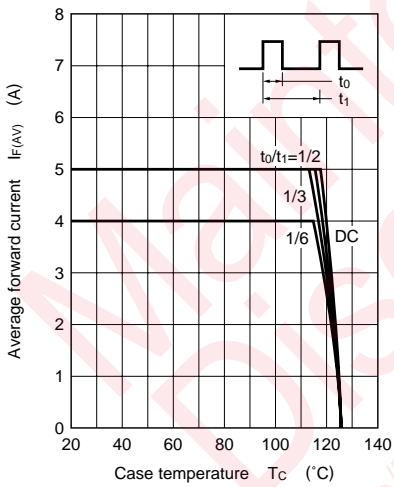
$I_R - V_R$



$P_{D(AV)} - I_{F(AV)}$



$I_{F(AV)} - T_C$



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