# MA3D799 (MA10799)

### Silicon epitaxial planar type (cathode common)

For switching mode power supply

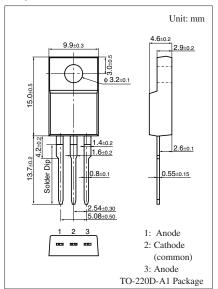
#### ■ Features

- Forward current (Average)  $I_{F(AV)} = 10$  A rectification is possible
- Cathode-common dual type
- Low forward voltage:  $V_F < 0.47 \text{ V}$

### ■ Absolute Maximum Ratings $T_C = 25$ °C

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	30	V
Forward current (Average)	I <sub>F(AV)</sub>	10	A
Non-repetitive peak forward surge current *	$I_{FSM}$	120	A
Junction temperature	T <sub>j</sub>	-40 to +125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

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



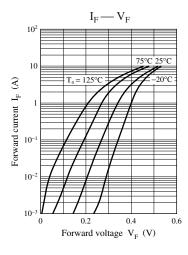
### ■ Electrical Characteristics $T_C = 25$ °C $\pm 3$ °C

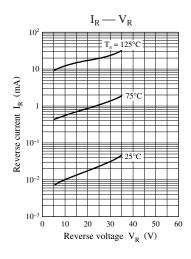
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{F}$	$I_F = 5 \text{ A}, T_C = 25^{\circ}\text{C}$			0.47	V
Reverse current	$I_R$	$V_R = 30 \text{ V}, T_C = 25^{\circ}\text{C}$			3	mA
Thermal resistance (j-c)	R <sub>th(j-c)</sub>				3.0	°C/W

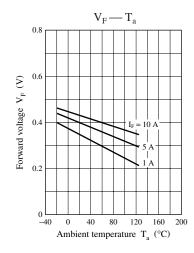
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

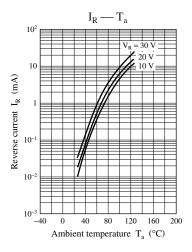
- This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
- 3. Absolute frequency of input and output is 100 MHz.

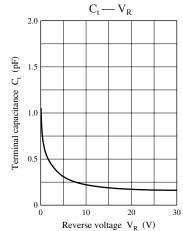
Note) The part number in the parenthesis shows conventional part number.

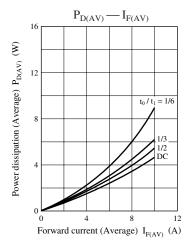


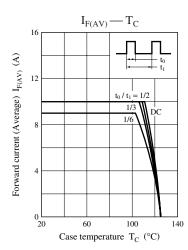












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