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# MA3D799 (MA10799)

## Silicon epitaxial planar type (cathode common)

For switching mode power supply

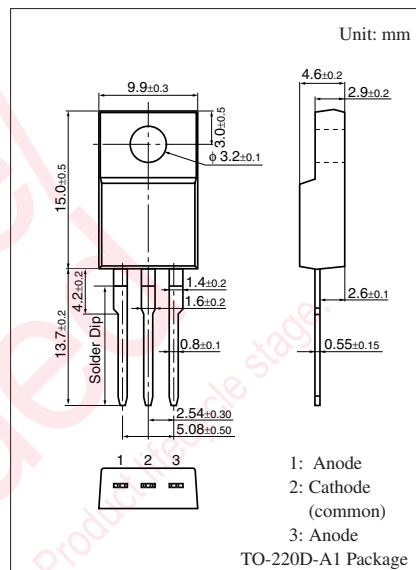
### ■ Features

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

### ■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current (Average)	$I_{F(AV)}$	10	A
Non-repetitive peak forward surge current *	$I_{FSM}$	120	A
Junction temperature	$T_j$	-40 to +125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

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



### ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

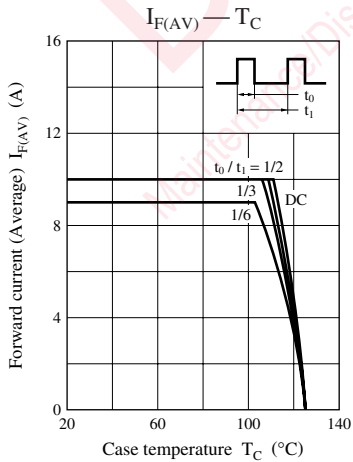
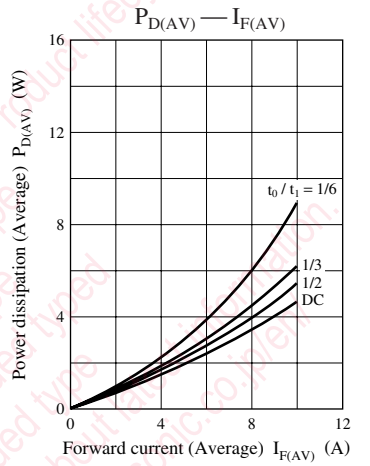
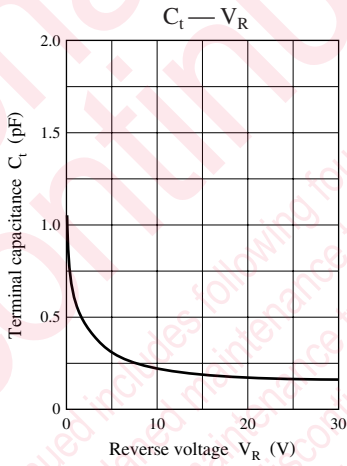
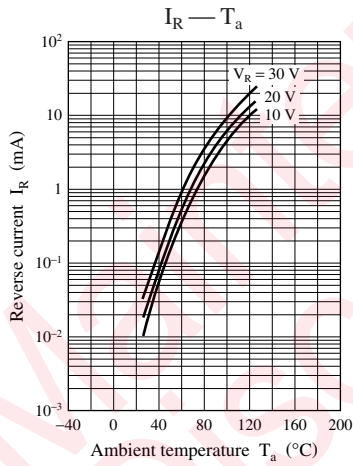
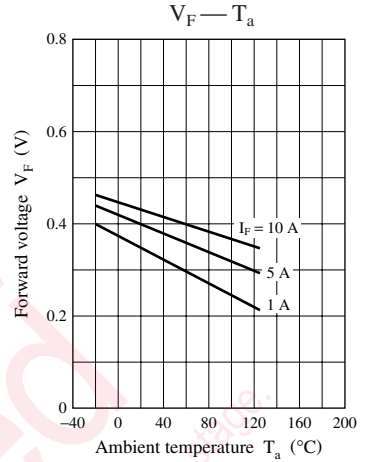
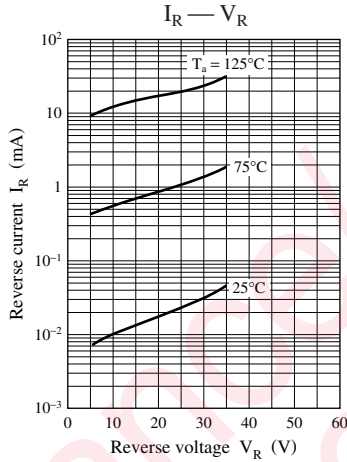
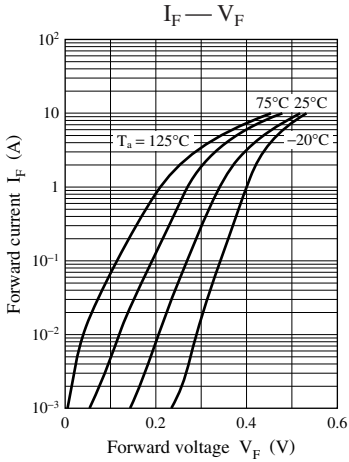
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 5$ A, $T_C = 25^\circ\text{C}$			0.47	V
Reverse current	$I_R$	$V_R = 30$ V, $T_C = 25^\circ\text{C}$			3	mA
Thermal resistance (j-c)	$R_{th(j-c)}$				3.0	$^\circ\text{C}/\text{W}$

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

2. 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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