

**MA3D750, MA3D750A (MA7D50, MA7D50A)**

Silicon epitaxial planar type (cathode common)

For switching mode power supply

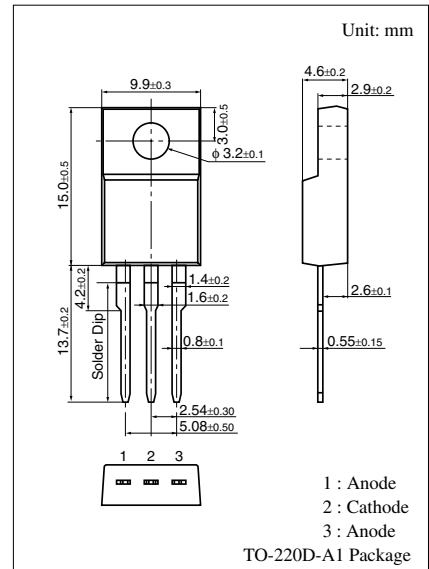
## ■ Features

- Low forward voltage  $V_F$
- High dielectric breakdown voltage:  $> 5$  kV
- Easy-to-mount, due to its V cut lead end
- TO-220D-A1 package

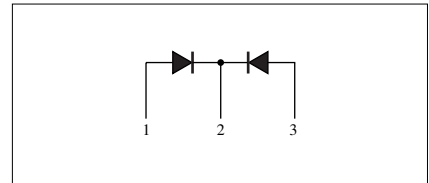
■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit	
Repetitive peak reverse-voltage	MA3D750 MA3D750A	$V_{RRM}$	40 45	V
Average forward current		$I_{F(AV)}$	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) \*: Half sine wave; 10 ms/cycle



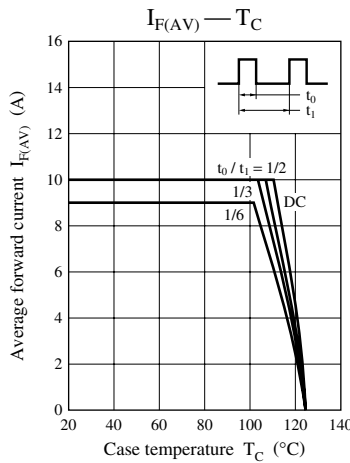
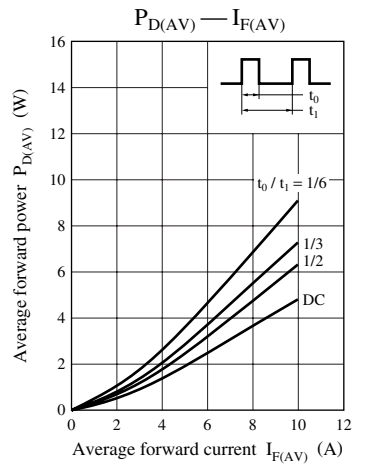
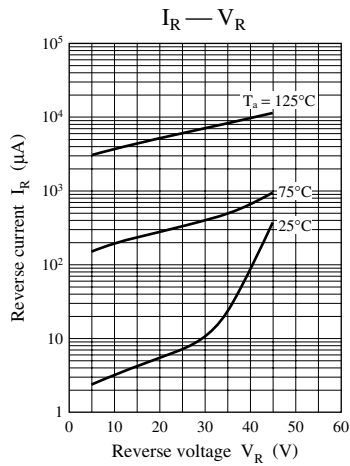
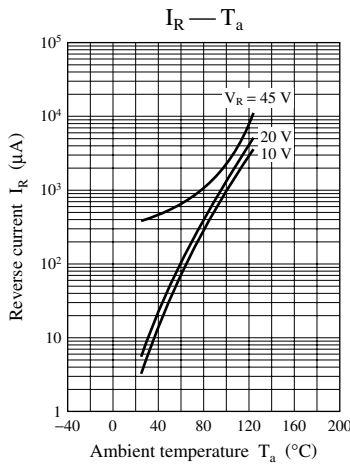
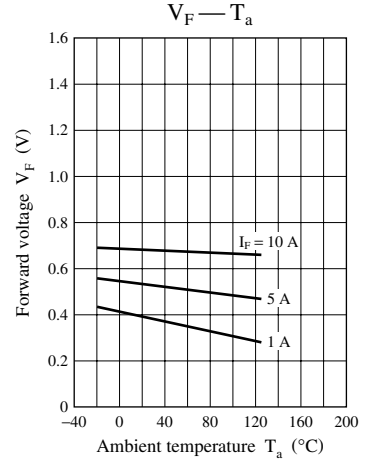
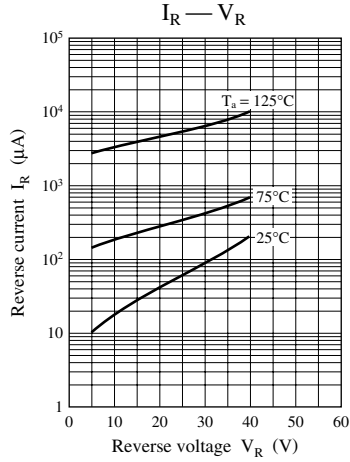
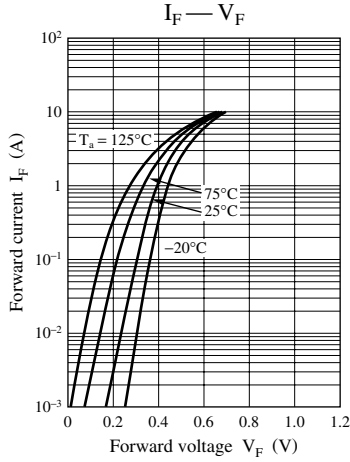
## Internal Connection

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3D750	$V_R = 40$ V, $T_C = 25^\circ\text{C}$			3	mA
	MA3D750A	$V_R = 45$ V, $T_C = 25^\circ\text{C}$			3	
Forward voltage (DC)	$V_F$	$I_F = 5$ A, $T_C = 25^\circ\text{C}$			0.55	V
High voltage rectification	$R_{th(j-c)}$	Smoothed current (between junction and case)			3	$^\circ\text{C/W}$

Note) Rated input/output frequency: 150 MHz

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



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