

# MA3D750, MA3D750A

## Silicon epitaxial planar type (cathode common)

For switching power supply

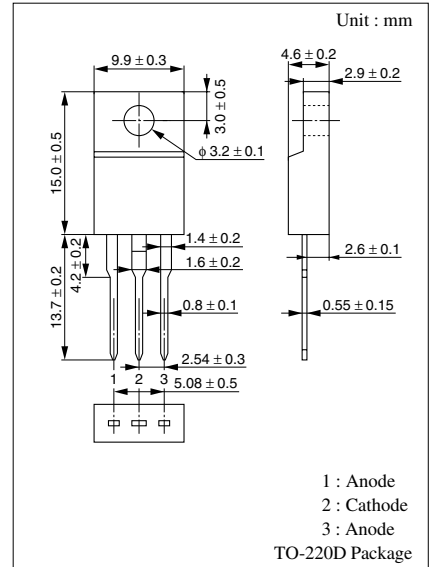
### ■ Features

- Low forward rise voltage  $V_F$
- TO-220D (Full-pack package) with high dielectric breakdown voltage > 5.0 kV
- Easy-to-mount, caused by its V cut lead end

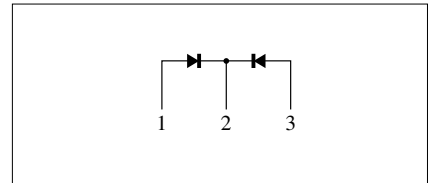
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Repetitive peak reverse voltage	MA3D750	$V_{RRM}$	40	V
	MA3D750A			
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	$V_R = 40 \text{ V}, T_C = 25^\circ\text{C}$			3	mA
	MA3D750A					
Forward voltage (DC)	$V_F$	$I_F = 5 \text{ A}, T_C = 25^\circ\text{C}$			0.55	V
Thermal resistance	$R_{th(j-c)}$	Direct current (between junction and case)			3	$^\circ\text{C/W}$

Note) Rated input/output frequency: 150 MHz

