

**MA3D752, MA3D752A (MA7D52, MA7D52A)**

Silicon epitaxial planar type (cathode common)

For switching power supply

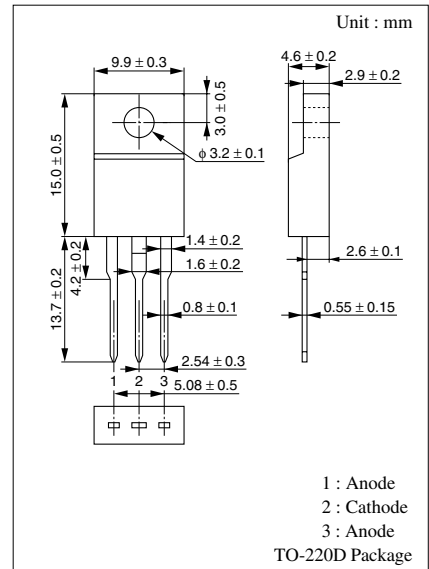
## ■ Features

- 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

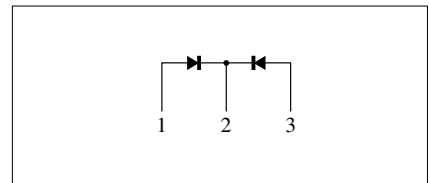
■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit	
Repetitive peak reverse voltage	MA3D752	$V_{RRM}$	40	V
	MA3D752A		45	
Non repetitive peak reverse voltage	MA3D752	$V_{RSM}$	40	V
	MA3D752A		45	
Average forward current	$I_{F(AV)}$	20	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



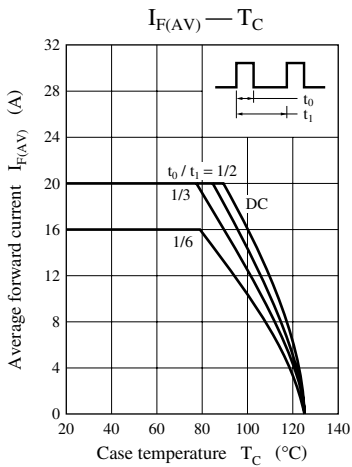
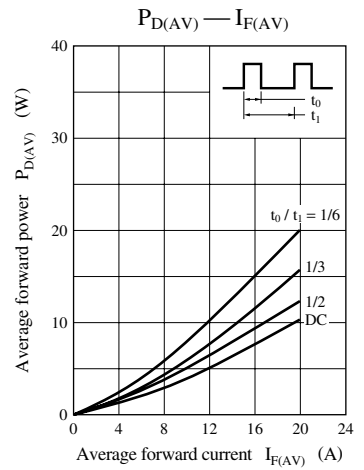
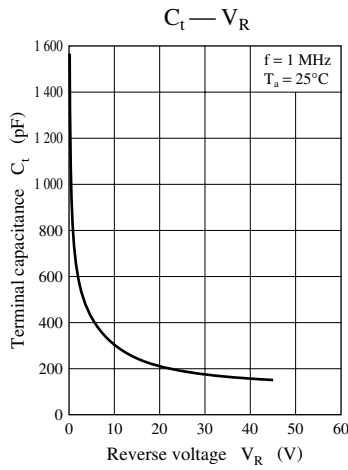
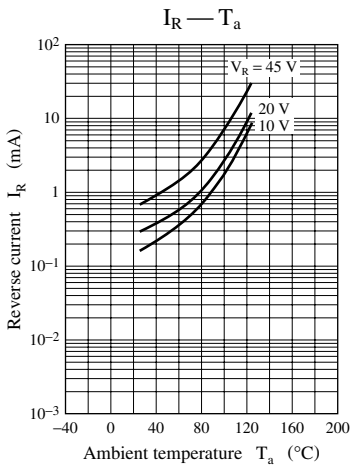
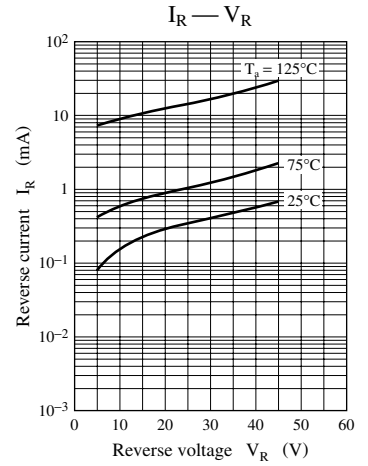
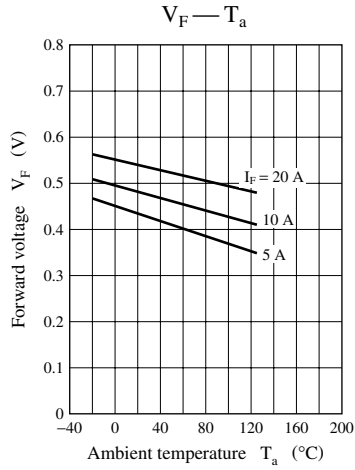
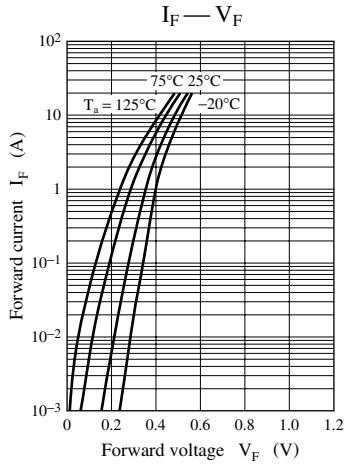
## Internal Connection

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3D752	$V_R = 40\text{ V}, T_C = 25^\circ\text{C}$			5	mA
	MA3D752A	$V_R = 45\text{ V}, T_C = 25^\circ\text{C}$			5	
Forward voltage (DC)	$V_F$	$I_F = 10\text{ A}, T_C = 25^\circ\text{C}$			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: 100 MHz

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



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