

MA3D752, MA3D752A (MA7D52, MA7D52A)

Silicon epitaxial planar type (cathode common)

For switching power supply

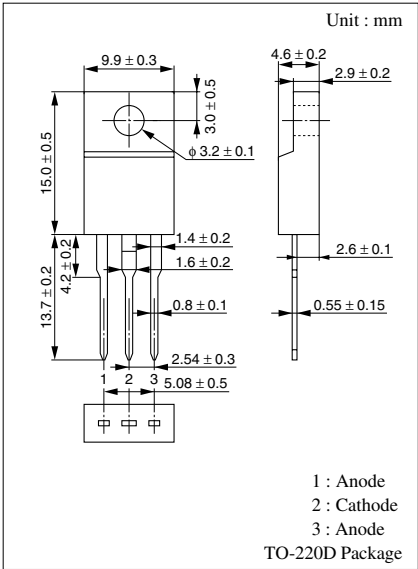
■ Features

- 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

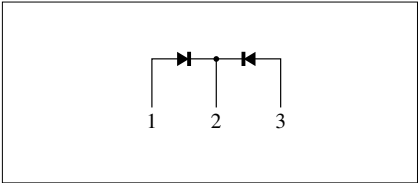
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	°C
Storage temperature		T_{stg}	−40 to +125	°C

Note) * : Half sine-wave; 10 ms/cycle



Internal Connection

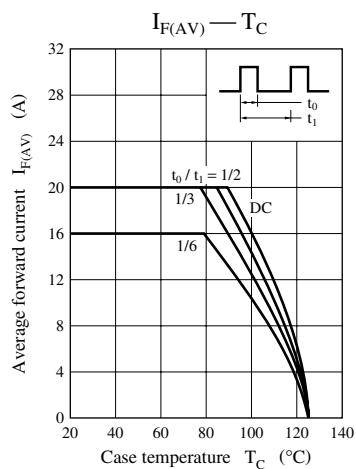
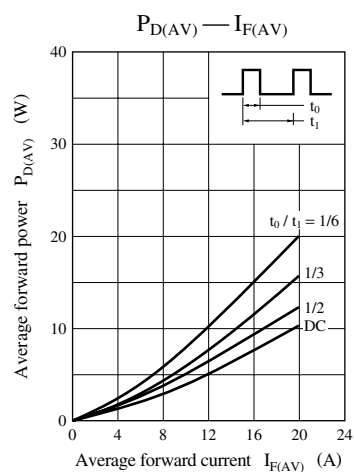
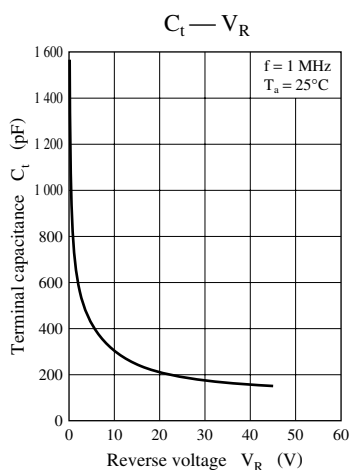
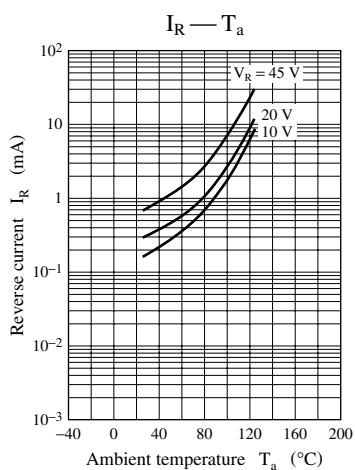
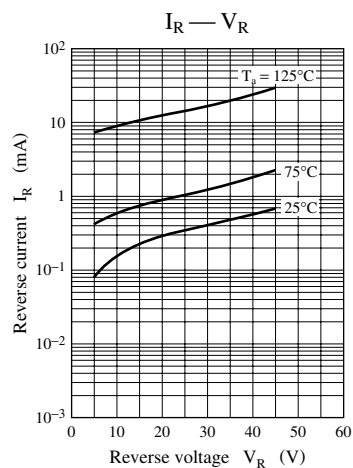
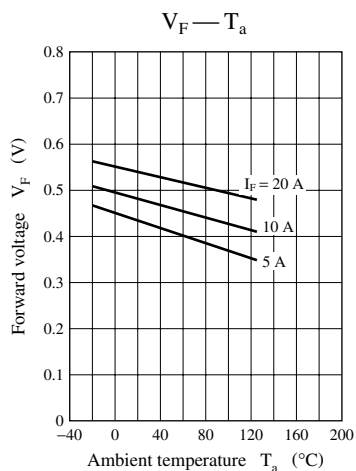
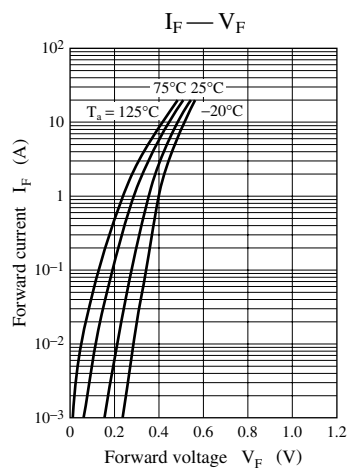


■ Electrical Characteristics $T_a = 25^\circ\text{C}$

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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