

MA3D752, MA3D752A (MA7D52, MA7D52A)

Silicon epitaxial planar type (cathode common)

For switching mode power supply

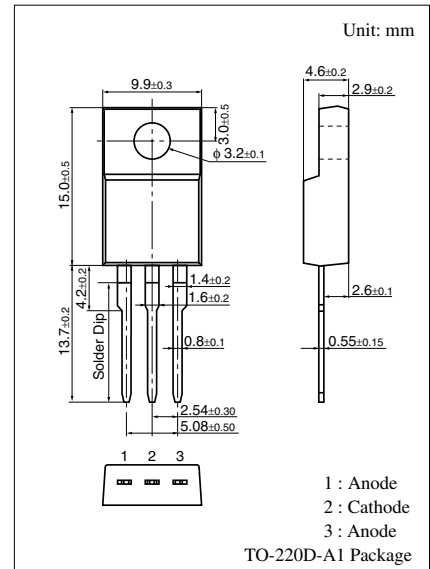
■ Features

- 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

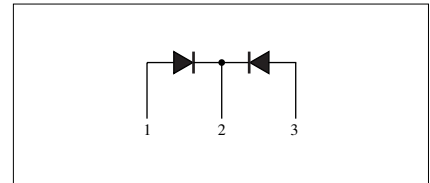
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive peak reverse-voltage	MA3D752 MA3D752A	V_{RRM} 40 45	V
Non-repetitive peak reverse-voltage	MA3D752 MA3D752A	V_{RSM} 40 45	V
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



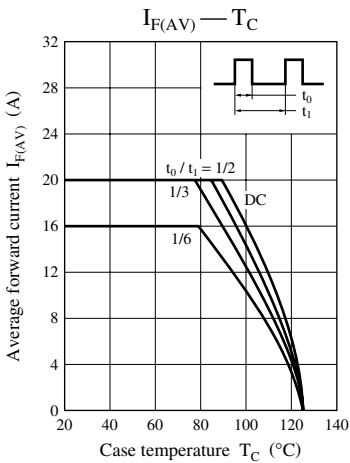
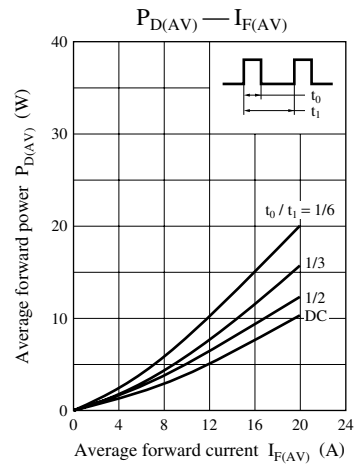
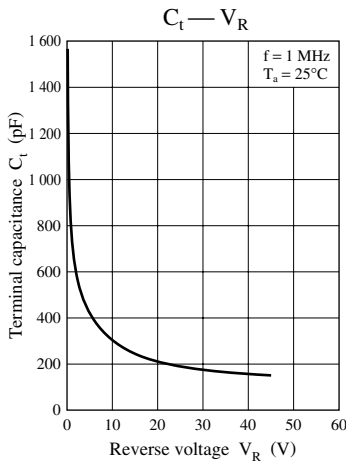
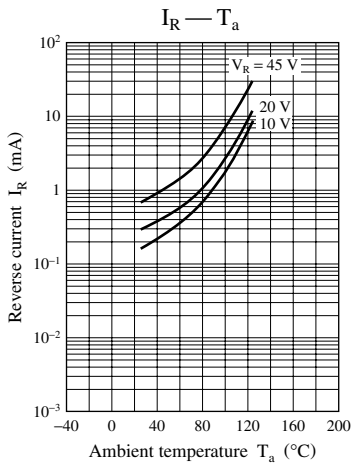
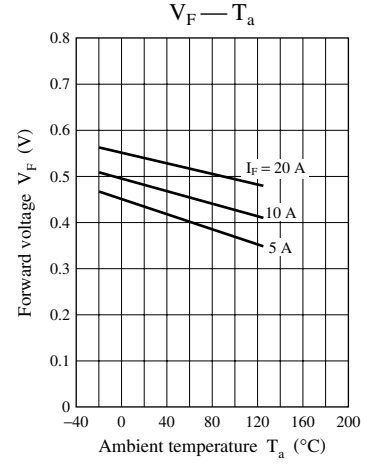
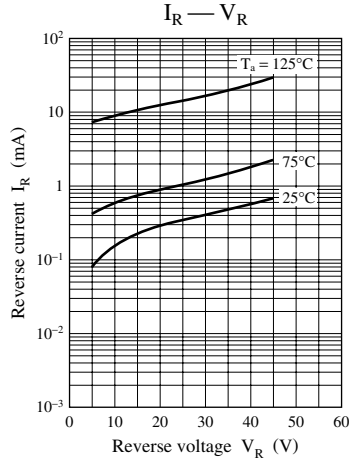
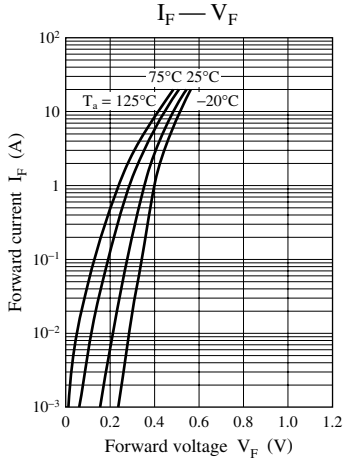
Internal Connection

■ 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
High voltage rectification	$R_{th(j-c)}$	Smoothed 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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