

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 $T_a = 25^\circ\text{C}$

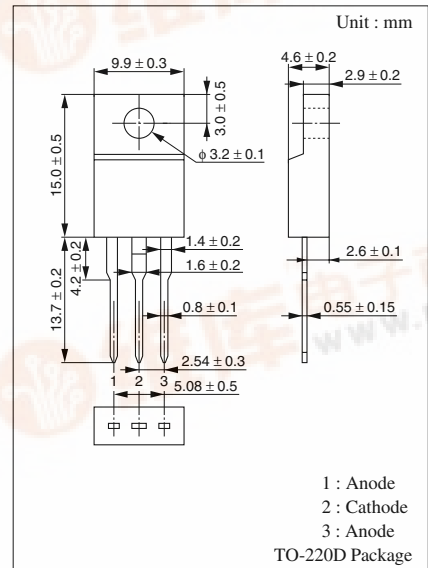
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	MA3D752	V_{RRM}	40 V
	MA3D752A		45
Non repetitive peak reverse voltage	MA3D752	V_{RSM}	40 V
	MA3D752A		45
Average forward current	$I_{F(AV)}$	20	A
Non-repetitive peak forward surge current*	I_{FSM}	120	A
Junction temperature	T_j	-40 to +125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

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

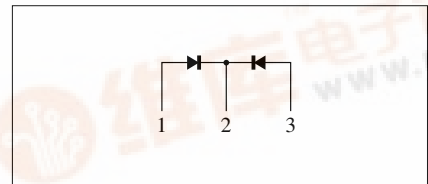
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

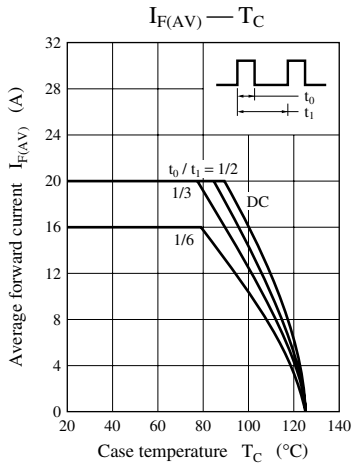
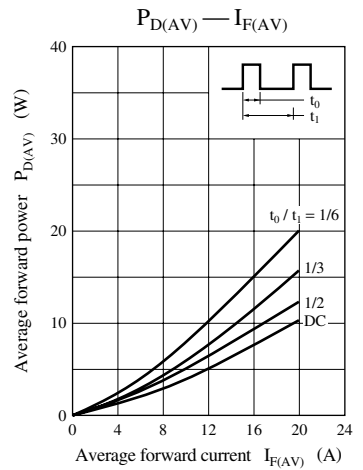
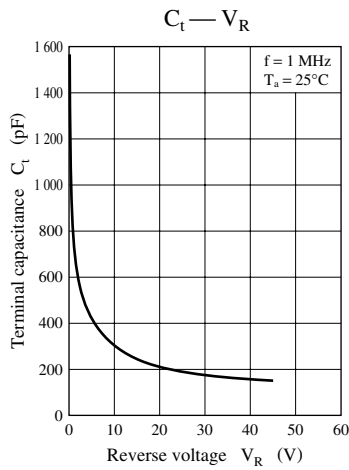
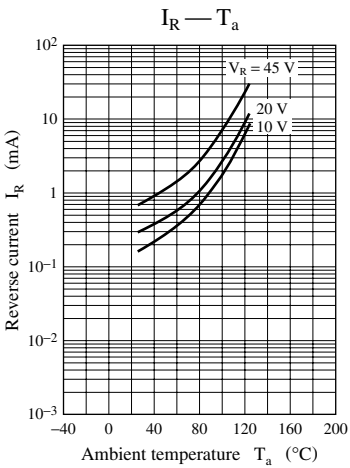
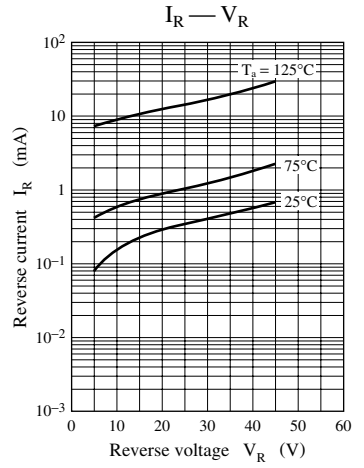
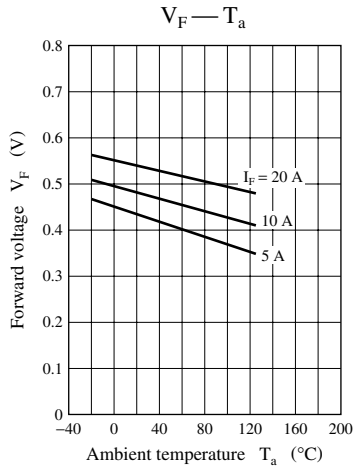
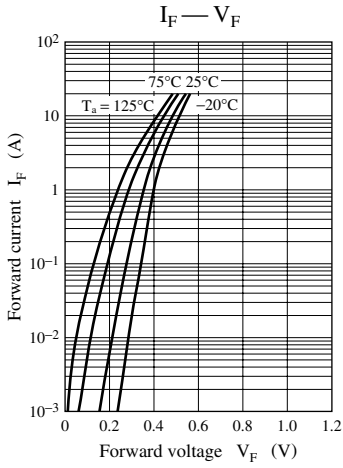
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3D752	$V_R = 40$ V, $T_C = 25^\circ\text{C}$			5	mA
	MA3D752A	$V_R = 45$ V, $T_C = 25^\circ\text{C}$			5	
Forward voltage (DC)	V_F	$I_F = 10$ A, $T_C = 25^\circ\text{C}$			0.55	V
Thermal resistance	$R_{th(j-c)}$	Direct current (between junction and case)			3	$^\circ\text{C/W}$

Note) Rated input/output frequency: 100 MHz



Internal Connection





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