

# MA3D752 (MA7D52), MA3D752A (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

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

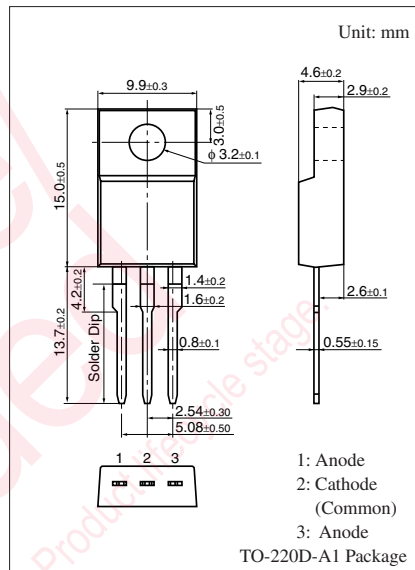
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	40	V
Non-repetitive peak forward surge voltage	$V_{RSM}$	40	V
Forward current (Average)	$I_{F(AV)}$	20	A
Non-repetitive peak forward surge current *	$I_{FSM}$	120	A
Junction temperature	$T_j$	-40 to +125	$^\circ\text{C}$
Storage temperature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

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

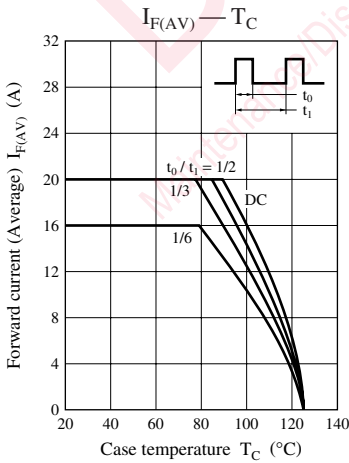
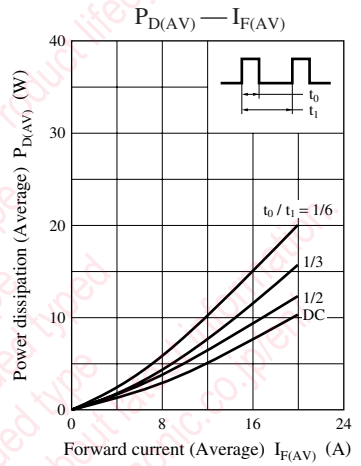
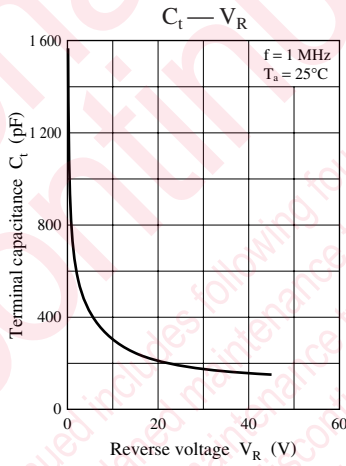
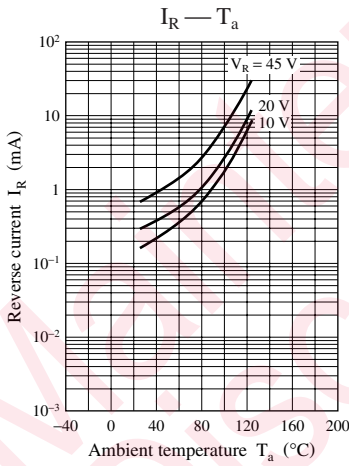
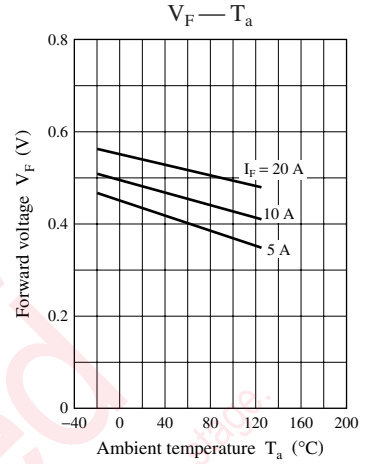
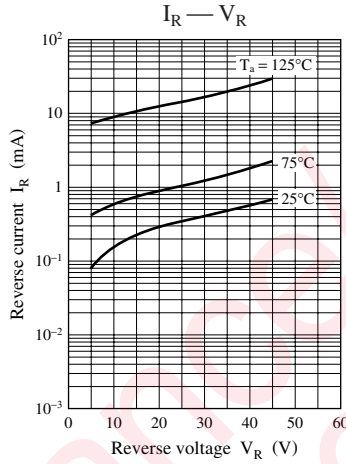
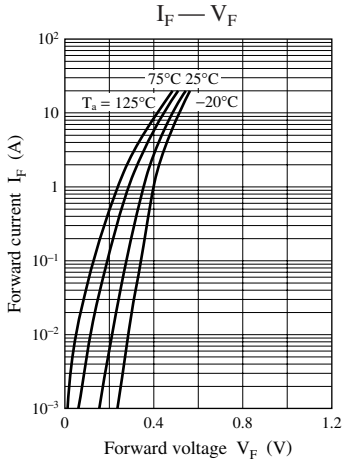
**■ Electrical Characteristics**  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 10\text{ A}, T_C = 25^\circ\text{C}$			0.55	V
Reverse current	$I_R$	$V_R = 40\text{ V}, T_C = 25^\circ\text{C}$			5	mA
		$V_R = 45\text{ V}, T_C = 25^\circ\text{C}$			5	
Thermal resistance (j-c)	$R_{th(j-c)}$				3.0	$^\circ\text{C/W}$

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.  
 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.  
 3. Absolute frequency of input and output is 100 MHz.



Note) The part numbers in the parenthesis show conventional part number.



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