

MA3D749, MA3D749A (MA7D49, MA7D49A)

Silicon epitaxial planar type (cathode common)

For switching mode power supply

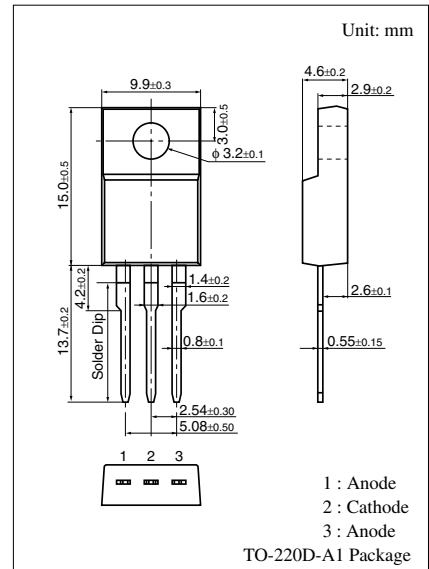
■ Features

- 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

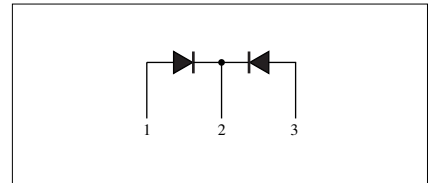
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Repetitive peak reverse-voltage	MA3D749 MA3D749A	V_{RRM}	40 45	V
Average forward current		$I_{F(AV)}$	5	A
Non-repetitive peak forward-surge-current *		I_{FSM}	90	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



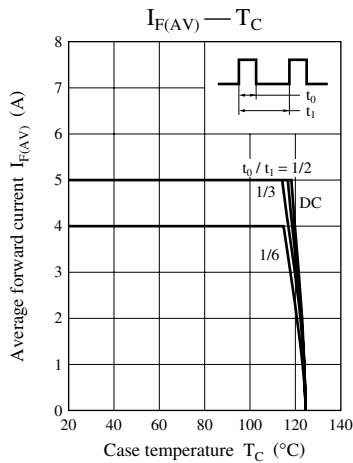
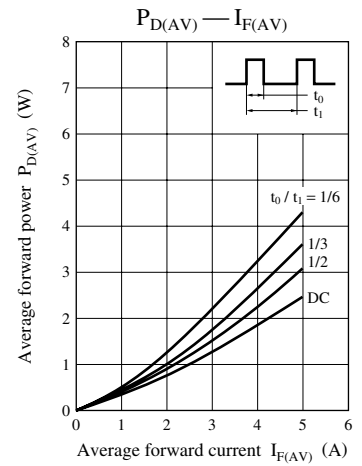
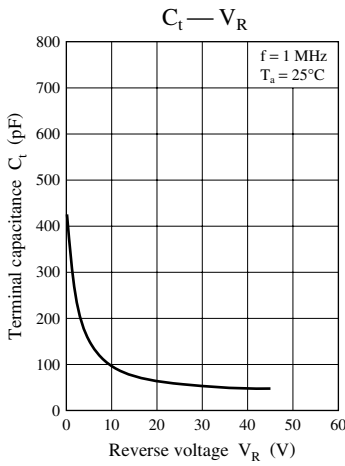
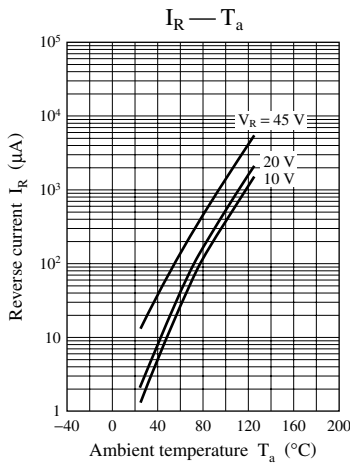
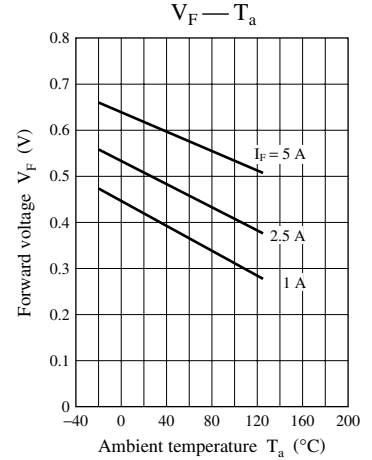
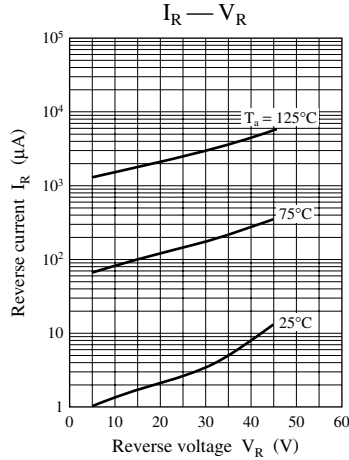
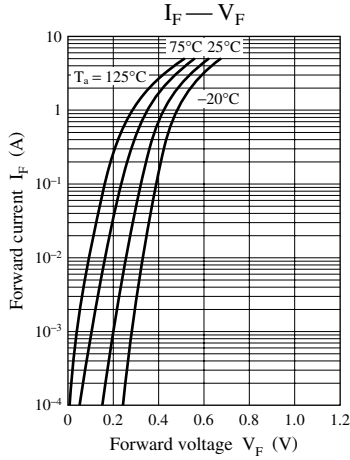
Internal Connection

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3D749	$V_R = 40$ V, $T_C = 25^\circ\text{C}$			1	mA
	MA3D749A	$V_R = 45$ V, $T_C = 25^\circ\text{C}$			1	
Forward voltage (DC)	V_F	$I_F = 2.5$ 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: 200 MHz

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



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