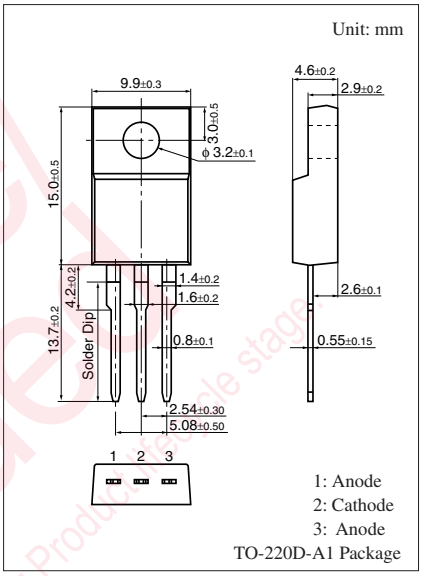
MA3D756 (MA7D56)

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 $T_C = 25°C$

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	60	V
Forward current (Average)	$I_{F(AV)}$	10	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

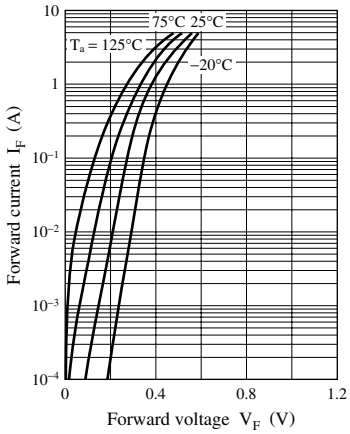
■ Electrical Characteristics $T_C = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 5$ A			0.58	V
Reverse current	I_R	$V_R = 60$ V			3	mA
Thermal resistance (j-c)	$R_{th(j-c)}$				3.0	°C/W

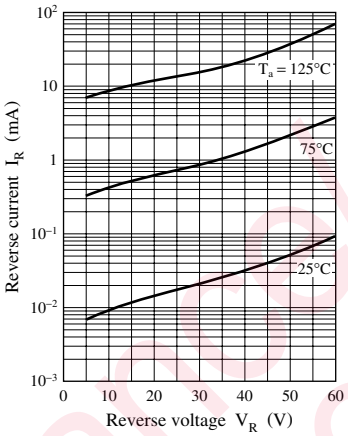
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 50 MHz.

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

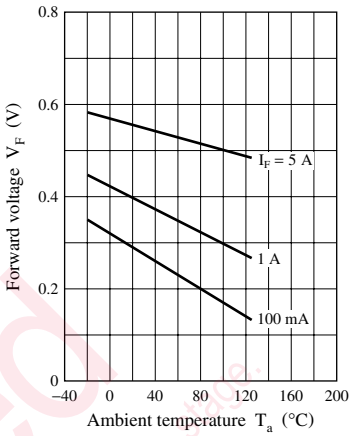
I_F — V_F



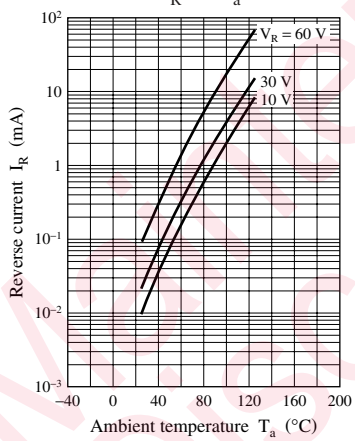
I_R — V_R



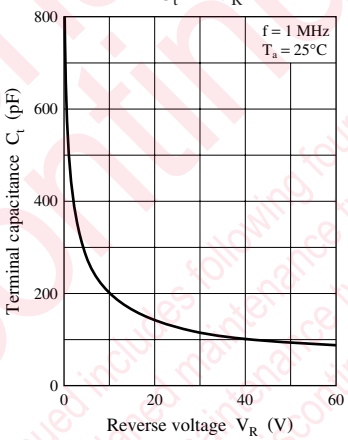
V_F — T_a



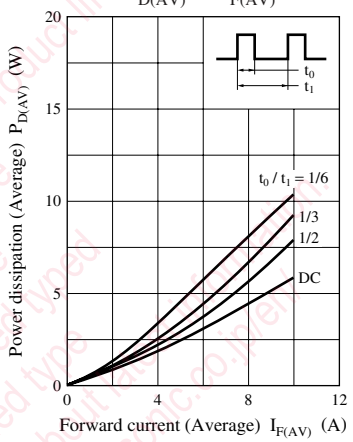
I_R — T_a



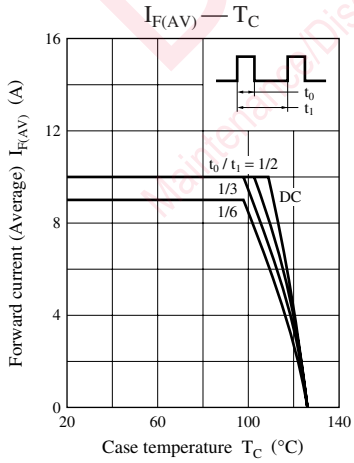
C_t — V_R



$P_{D(AV)}$ — $I_{F(AV)}$



$I_{F(AV)}$ — T_C



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