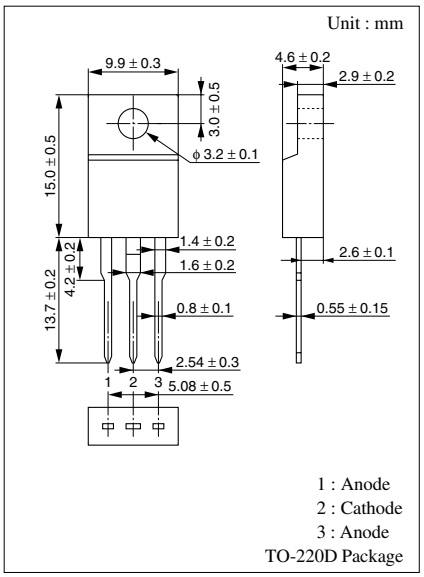
MA3D755

Silicon epitaxial planar type (cathode common)

For switching power supply



■ Features

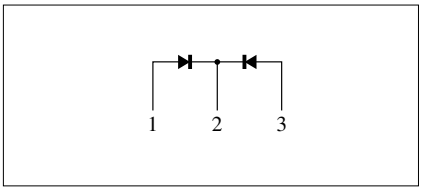
- Low forward rise voltage V_F
- TO-220D (Full-pack package) with high dielectric breakdown voltage > 5.0 kV
- Easy-to-mount, caused by its V cut lead end

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	60	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	°C
Storage temperature	T_{stg}	−40 to +125	°C

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

Internal Connection

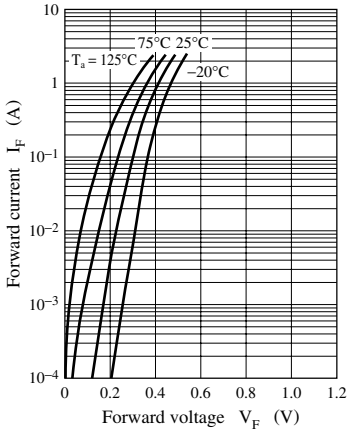


■ Electrical Characteristics $T_a = 25°C$

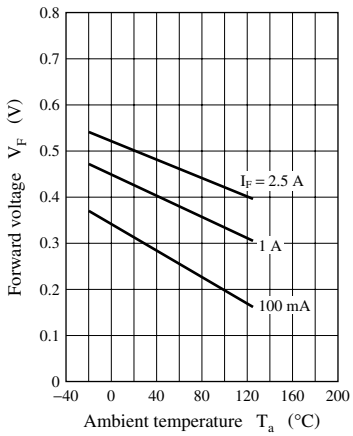
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 60 V			1	mA
Forward voltage (DC)	V_F	I_F = 2.5 A			0.58	V
Thermal resistance	$R_{th(j-c)}$	Direct current (between junction and case)			3	°C/W

Note) Rated input/output frequency: 200 MHz

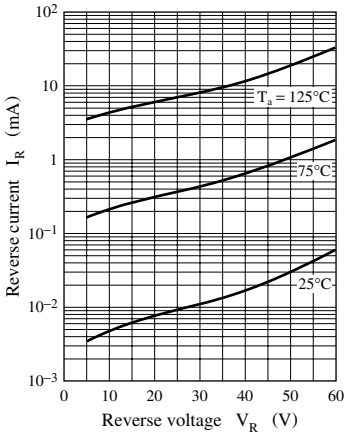
I_F — V_F



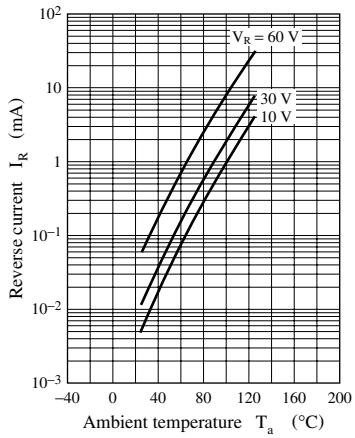
V_F — T_a



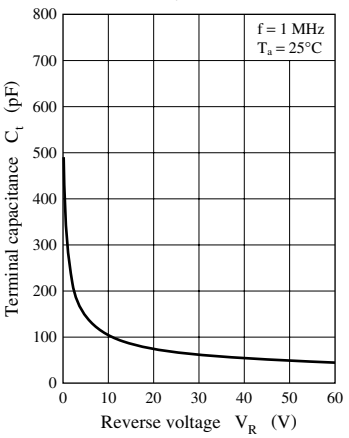
I_R — V_R



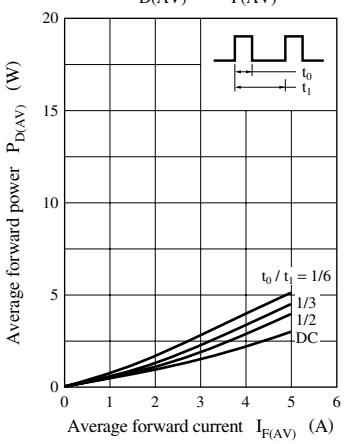
I_R — T_a



C_t — V_R



$P_{D(AV)}$ — $I_{F(AV)}$



$I_{F(AV)}$ — T_C

