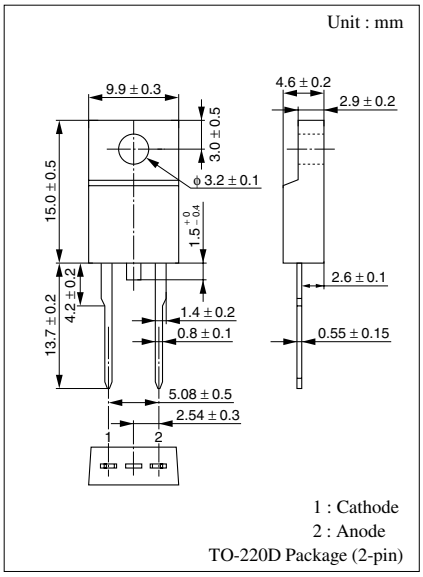
MA2D755

Silicon epitaxial planar type

For switching power supply



■ Features

- TO-220D Package
- Allowing to rectify under ($I_{F(AV)}$ = 5 A) condition
- V_R = 60 V guaranteed
- Single type

■ Absolute Maximum Ratings $T_a = 25°C$

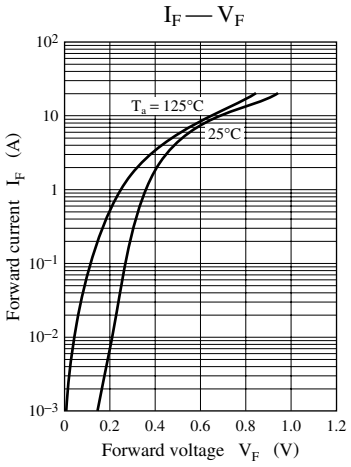
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	60	V
Average forward current	$I_{F(AV)}$	5	A
Non-repetitive peak forward surge current*	I_{FSM}	90	A
Junction temperature	T_j	−40 to +125	°C
Storage temperature	T_{stg}	−40 to +125	°C

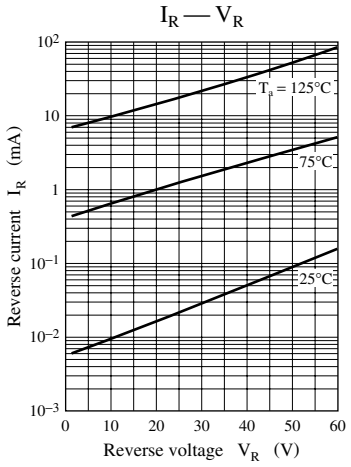
Note) * : The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

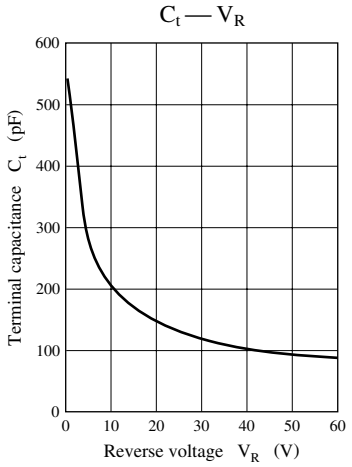
■ Electrical Characteristics $T_a = 25°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 60 V			3	mA
Forward voltage (DC)	V_F	I_F = 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: 150 kHz


I_F — V_F
10^2
10
1
10^{-1}
10^{-2}
10^{-3}
Forward current I_F (A)
T_a = 125°C
25°C
0
0.2
0.4
0.6
0.8
1.0
1.2
Forward voltage V_F (V)


I_R — V_R
10^2
10
1
10^{-1}
10^{-2}
10^{-3}
Reverse current I_R (mA)
T_a = 125°C
75°C
25°C
0
10
20
30
40
50
60
Reverse voltage V_R (V)


C_t — V_R
600
500
400
300
200
100
0
Terminal capacitance C_t (pF)
0
10
20
30
40
50
60
Reverse voltage V_R (V)