

# MA755

## Silicon epitaxial planer type (cathode common)

For switching power supply

### ■ Features

- Forward current (average)  $I_{F(AV)}$  : 5A type
- Repetitive peak reverse voltage  $V_{RRM}$  : 60V type
- Sealed in TO-220F full-pack package, with high reliability
- Cathode common dual type
- Low forward voltage  $V_F$

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

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	$^\circ\text{C}$
Storage temperature	$T_{stg}$	- 40 to +125	$^\circ\text{C}$

\* Sine half wave : 10ms/cycle

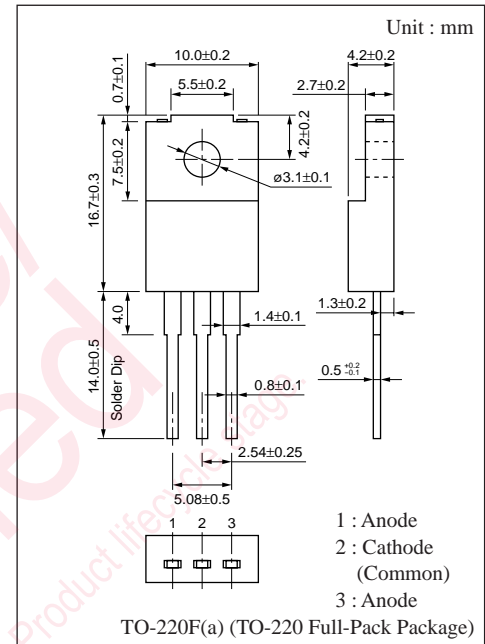
### ■ Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	$I_R$	$V_R = 60\text{V}$			1	mA
Forward voltage (DC)	$V_F$	$I_F = 2.5\text{A}$			0.58	V
Thermal resistance	$R_{th(j-c)}$	Flat direct current between junction and case			3	$^\circ\text{C/W}$

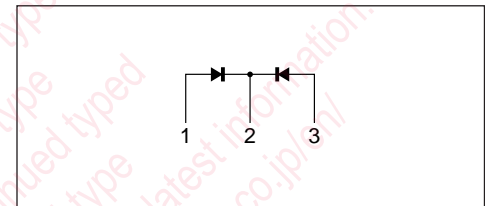
❖ Rated input/output frequency : 200MHz

### ■ Marking

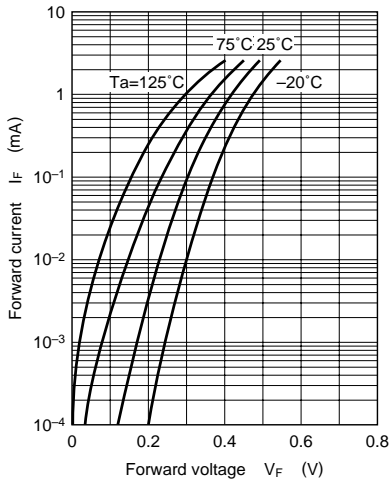
Part Number	MA755
Symbol	MA755



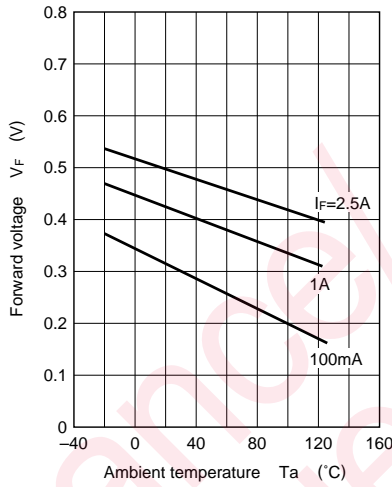
### ■ Internal Connection



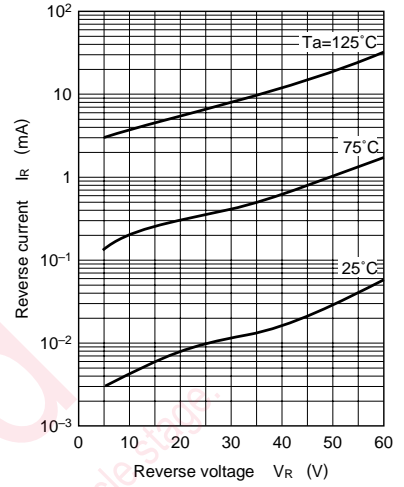
$I_F - V_F$



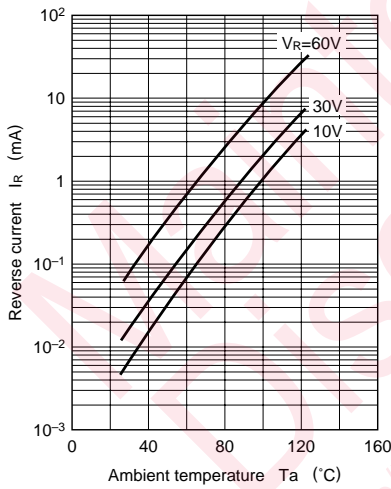
$V_F - T_a$



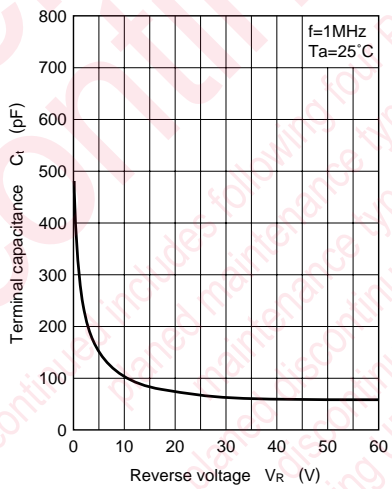
$I_R - V_R$



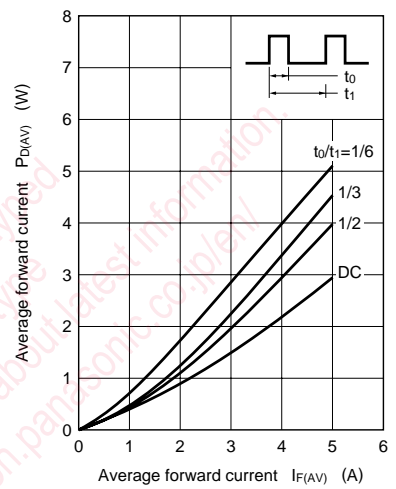
$I_R - T_a$



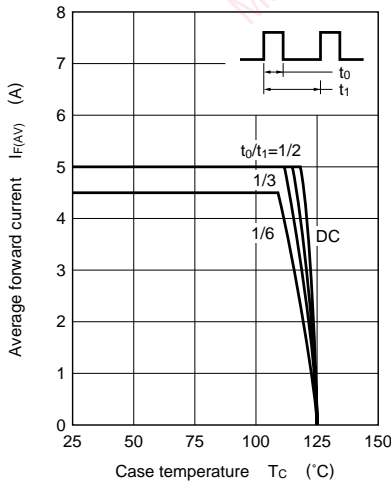
$C_t - V_R$



$P_{D(AV)} - I_{F(AV)}$



$I_{F(AV)} - T_C$



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