

MA7D52, MA7D52A

Silicon epitaxial planer type (cathode common)

For switching power supply

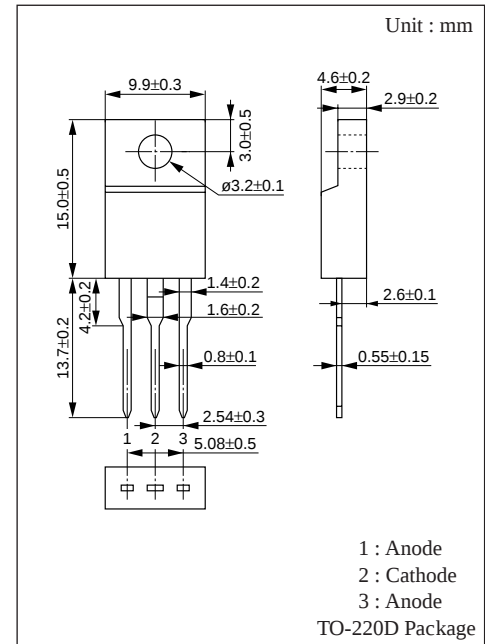
■ Features

- Low forward voltage V_F
- TO-220D (full-pack package) with high dielectric strength > 5.0kV
- Lead end to be V cut for easy mounting

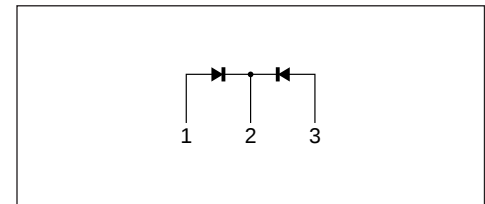
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	MA7D52	40	V
	MA7D52A	45	
Non-repetitive peak reverse voltage	MA7D52	40	V
	MA7D52A	45	
Average forward current	$I_{F(AV)}$	20	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

* Sine half wave : 10ms/cycle



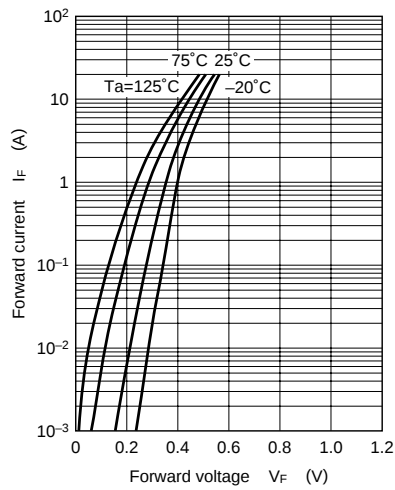
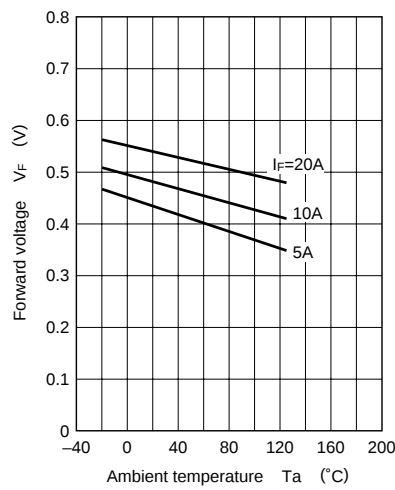
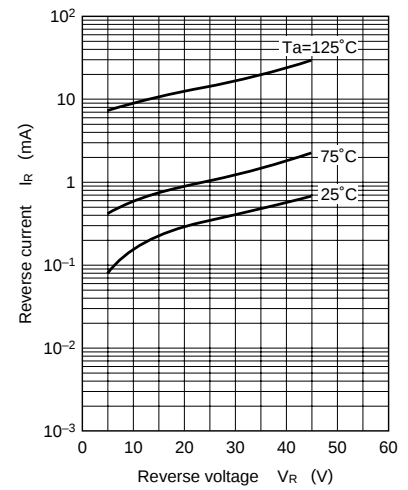
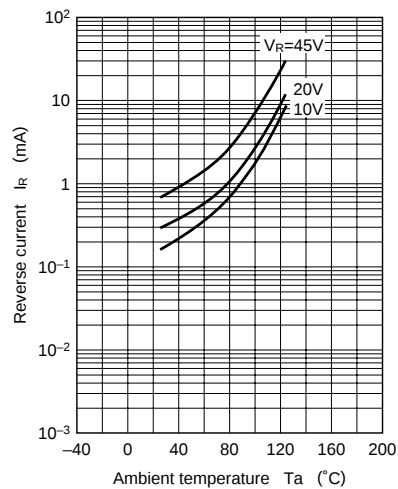
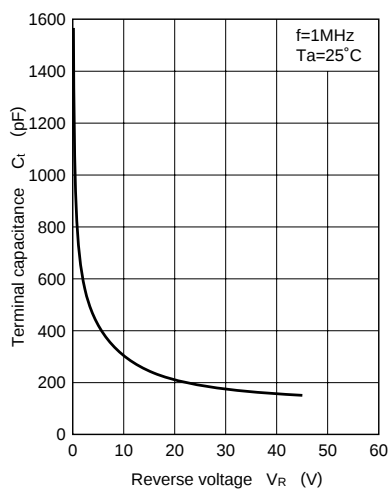
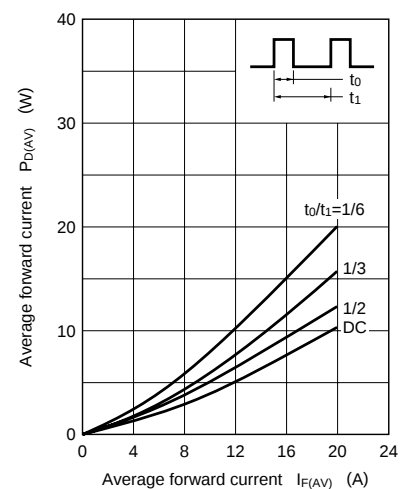
■ Internal Connection



■ Electrical Characteristics (Ta= 25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	MA7D52	$V_R = 40V, T_C = 25^\circ C$			5	mA
	MA7D52A	$V_R = 45V, T_C = 25^\circ C$			5	
Forward voltage (DC)	V_F	$I_F = 10A, T_C = 25^\circ C$			0.55	V
Thermal resistance	$R_{th(j-c)}$	Flat direct current between junction and case			3	°C/W

❖ Rated input/output frequency : 100MHz

$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $C_t - V_R$  $P_{D(AV)} - I_{F(AV)}$  $I_{F(AV)} - T_C$ 