

# MA3X789

Silicon epitaxial planar type

For super-high speed switching circuit

For small current rectification

## ■ Features

- Allowing to rectify under ( $I_{F(AV)} = 200 \text{ mA}$ ) condition
- Reverse voltage  $V_R$  (DC value) = 60 V guaranteed

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	60	V
Peak reverse voltage	$V_{RM}$	60	V
Average forward current	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current*	$I_{FSM}$	2	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 50 \text{ V}$			100	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 500 \text{ mA}$			0.65	V
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		60		pF
Reverse recovery time*	$t_{rr}$	$I_F = I_R = 100 \text{ mA}$ $I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		4.5		ns

Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.  
2. Rated input/output frequency: 100 MHz  
3. \* :  $t_{rr}$  measuring circuit



