

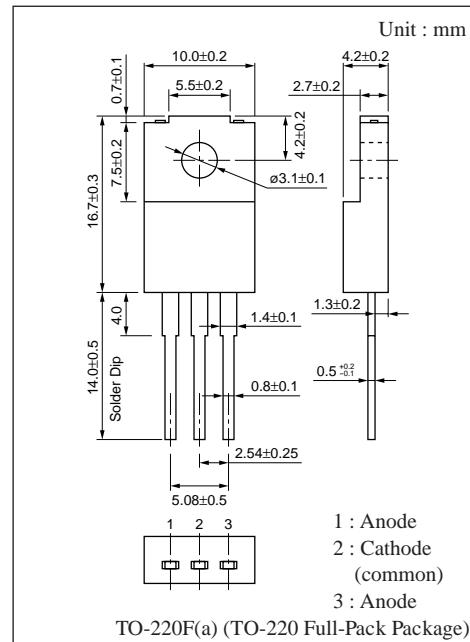
# MA650

## Silicon planer type (cathode common)

For switching

### ■ Features

- High reverse voltage  $V_R$
- Low forward voltage  $V_F$
- Fast reverse recovery time  $t_{rr}$

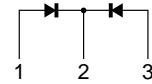


### ■ Absolute Maximum Ratings ( $T_a = 25^\circ C$ )

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	200	V
Non-repetitive peak reverse voltage	$V_{RSM}$	200	V
Average forward current	$I_{F(AV)}$	10	A
Non-repetitive peak forward surge current	$I_{FSM}^*$	60	A
Junction temperature	$T_j$	-40 to +150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

\* Sine half wave : 10ms/cycle

### ■ Internal Connection



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

Parameter	Symbol	Condition	min	typ	max	Unit
Repetitive peak reverse current	$I_{RRM1}$	$V_{RRM}= 200V, T_C= 25^\circ C$			100	$\mu A$
	$I_{RRM2}$	$V_{RRM}= 200V, T_j= 150^\circ C$			6	mA
Forward voltage (DC)	$V_F$	$I_F= 5A, T_C= 25^\circ C$			1	V
Reverse recovery time	$t_{rr}^*$	$I_F= 1A, I_R= 1A$			100	ns
Thermal resistance	$R_{th(j-c)}$	Flat direct current between junction and case			3	$^\circ C/W$
	$R_{th(j-a)}$				63	$^\circ C/W$

Note 1. Rated input/output frequency : 10MHz

2. \*  $t_{rr}$  measuring circuit

