

# MA3UD06

## Silicon epitaxial planar type (cathode common)

For switching power supply

### ■ Features

- U-type package
- Allowing to rectify under ( $I_{F(AV)} = 6 \text{ A}$ ) condition
- Low forward rise voltage  $V_F$  ( $V_F < 0.45 \text{ V}$ )
- Cathode common type

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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Average forward current*1	$I_{F(AV)}$	6	A
Non-repetitive peak forward surge current*2	$I_{FSM}$	45	A
Junction temperature	$T_j$	-40 to +125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

Note) \*1 :  $T_C = 25^\circ\text{C}$

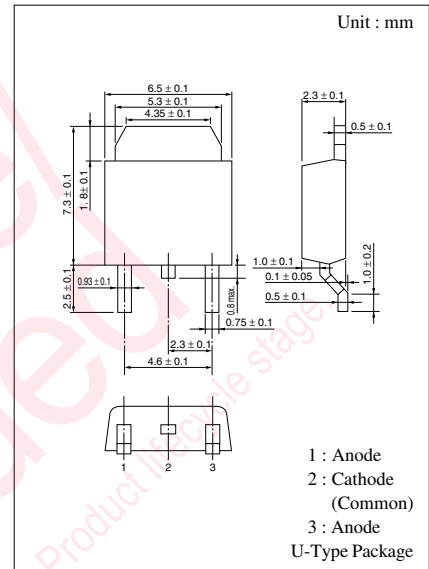
\*2 : Sine half-wave; 10 ms/cycle

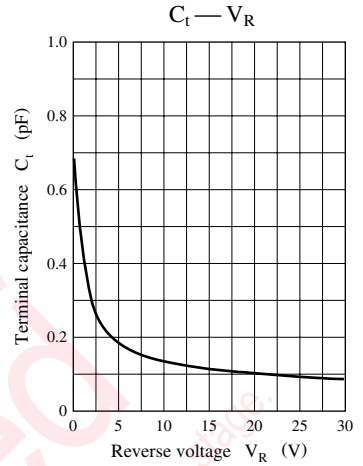
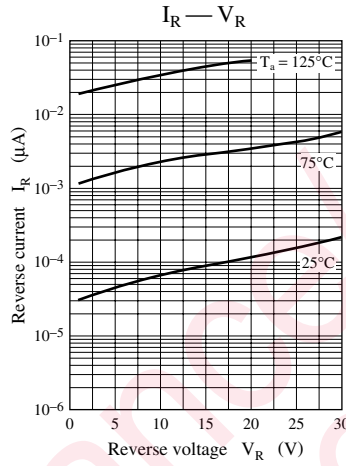
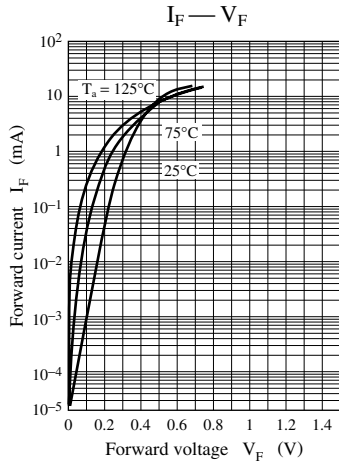
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}, T_C = 25^\circ\text{C}$			1.0	mA
Forward voltage (DC)	$V_F$	$I_F = 3 \text{ A}, T_C = 25^\circ\text{C}$			0.45	V
Thermal resistance*	$R_{th(j-c)}$	Between junction and case			12.5	$^\circ\text{C/W}$

Note) 1. Rated input/output frequency: 200 MHz

2. \* :  $T_C = 25^\circ\text{C}$





Maintenance/Discontinued includes following four Product lifecycle stages:  
 planned maintenance type  
 maintenance type  
 planned discontinued type  
 discontinued type  
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