

# MA3G695 (MA695)

Silicon planar type (cathode common)

For high-frequency rectification

■ Features

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

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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	400	V
Non-repetitive peak reverse surge voltage	$V_{RSM}$	400	V
Average forward current	$I_{F(AV)}$	20	A
Non-repetitive peak forward surge current*	$I_{FSM}$	120	A
Junction temperature	$T_j$	-40 to +150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$

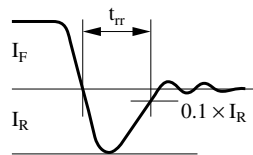
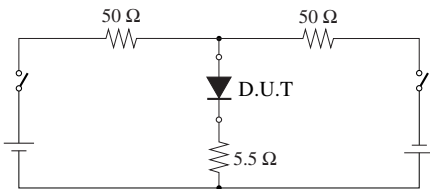
Note) \* : Half sine-wave; 10 ms/cycle

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

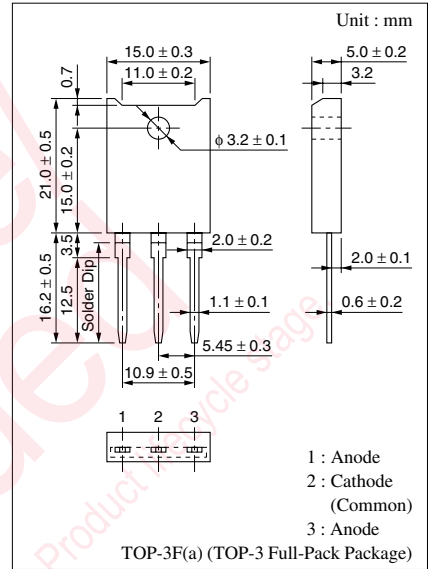
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Repetitive peak reverse current	$I_{RRM1}$	$V_{RRM} = 400\text{ V}, T_C = 25^\circ\text{C}$			50	$\mu\text{A}$
	$I_{RRM2}$	$V_{RRM} = 400\text{ V}, T_j = 150^\circ\text{C}$			10	mA
Forward voltage (DC)	$V_F$	$I_F = 10\text{ A}, T_C = 25^\circ\text{C}$			1	V
Reverse recovery time*	$t_{rr}$	$I_F = 1\text{ A}, I_R = 1\text{ A}$			100	ns
Thermal resistance	$R_{th(j-c)}$	Direct current (between junction and case)			1.5	$^\circ\text{C/W}$
	$R_{th(j-a)}$				41.6	$^\circ\text{C/W}$

Note) 1. Rated input/output frequency: 10 MHz

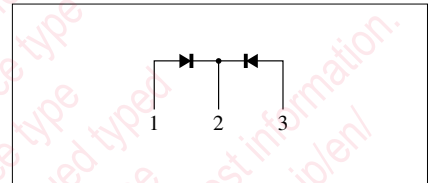
2. \* :  $t_{rr}$  measuring circuit

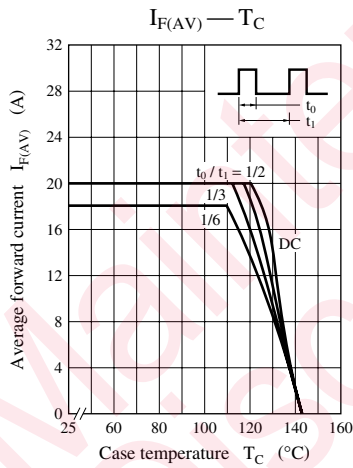
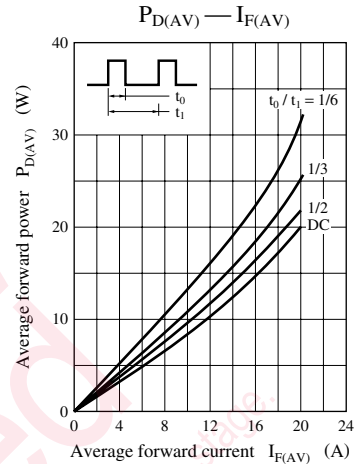
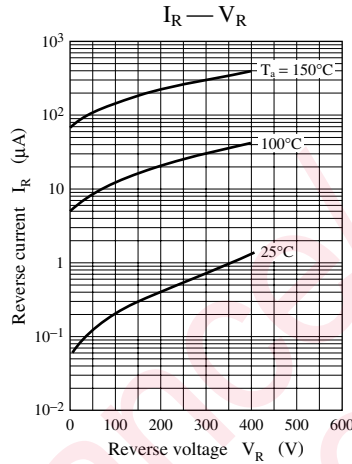
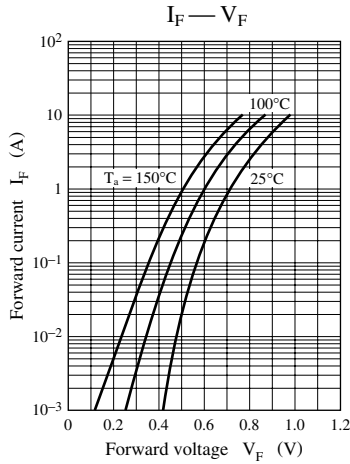


Note) The part number in the parenthesis shows conventional part number.



Internal Connection





Maintenance/Discontinued includes following four Product lifecycle types:  
 planned maintenance type  
 maintenance type  
 planned discontinued type  
 discontinued type  
 Please visit following URL about latest information.  
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