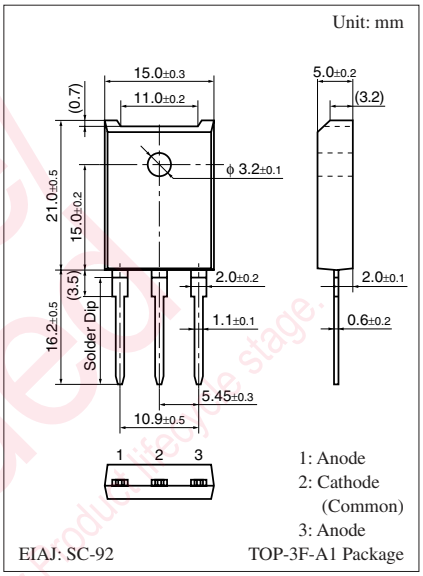
MA3G655 (MA655)

Silicon planar type (cathode common)

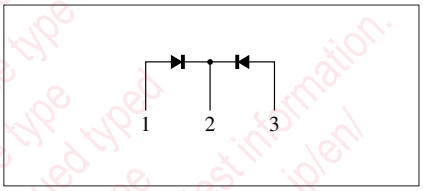
For high-frequency rectification



■ Features

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

Internal Connection



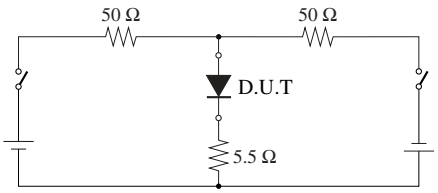
■ Absolute Maximum Ratings $T_a = 25°C$

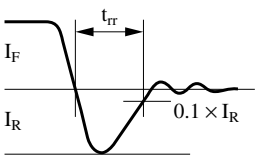
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	300	V
Non-repetitive peak reverse surge voltage	V_{RSM}	300	V
Forward current (Average)	$I_{F(AV)}$	20	A
Non-repetitive peak forward surge current	I_{FSM}	150	A
Junction temperature	T_j	−40 to +150	°C
Storage temperature	T_{stg}	−40 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 10 A, T_C = 25°C			1.0	V
Repetitive peak reverse current	I_{RRM1}	V_{RRM} = 300 V, T_C = 25°C			20	μA
	I_{RRM2}	V_{RRM} = 300 V, T_j = 150°C			5	mA
Reverse recovery time *	t_{rr}	I_F = 1 A, I_R = 1 A			50	ns
Thermal resistance (j-c)	$R_{th(j-c)}$				1.5	°C/W
Thermal resistance (j-a)	$R_{th(j-a)}$				40	°C/W

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 10 MHz.
3. *: t_{rr} measurement circuit





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

Maintenance/Discontinued
This product includes following maintenance/discontinued type.
Planned maintenance type
Maintenance type
Discontinued type
Discontinued type
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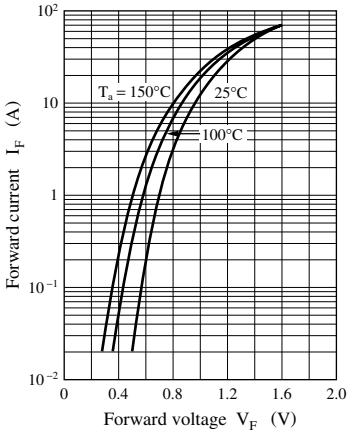
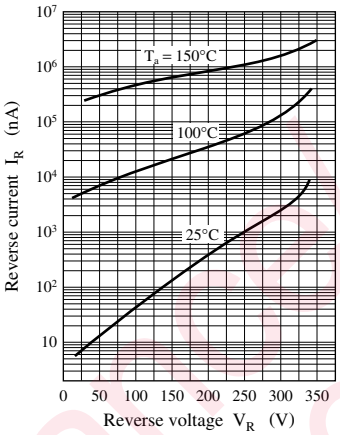
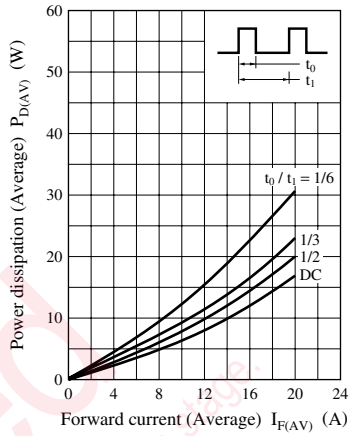
I_F — V_F



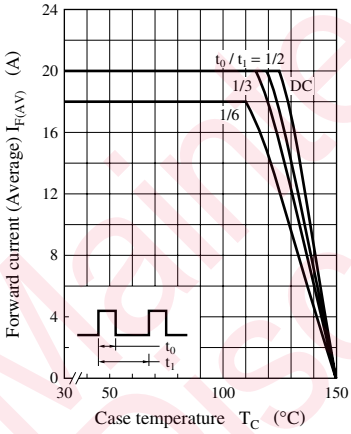
I_R — V_R



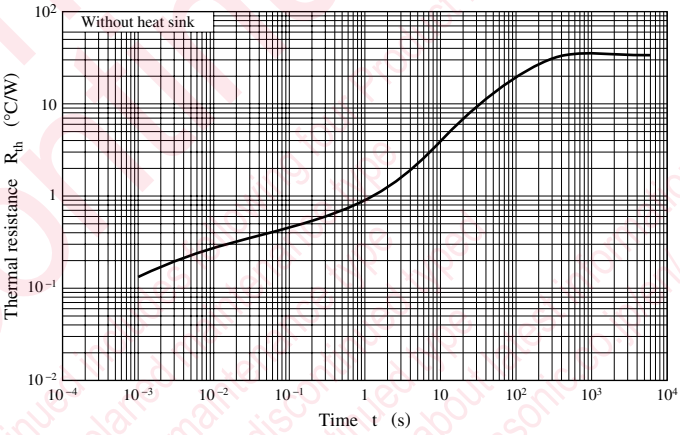
$P_{D(AV)}$ — $I_{F(AV)}$



$I_{F(AV)}$ — T_C



R_{th} — t



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