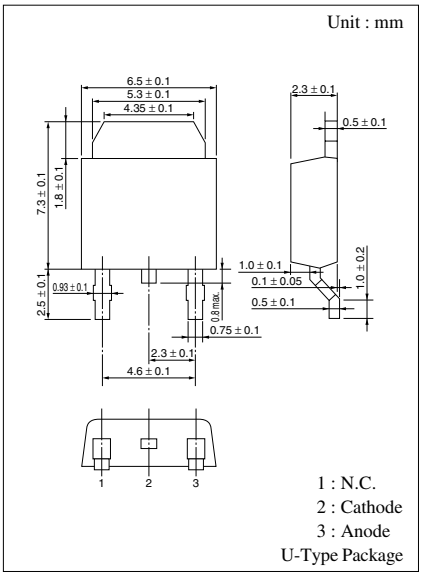
MA3U689

Silicon planar type

For high-frequency rectification



■ Features

- Small U-type package for surface mounting
- Low-loss type with fast reverse recovery time t_{rr}
- Single type

■ Absolute Maximum Ratings $T_a = 25°C$

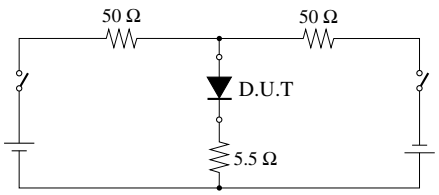
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	V
Non-repetitive peak reverse surge voltage	V_{RSM}	200	V
Average forward current*1	$I_{F(AV)}$	2.5	A
Non-repetitive peak forward surge current*2	I_{FSM}	40	A
Junction temperature	T_j	−40 to +150	°C
Storage temperature	T_{stg}	−40 to +150	°C

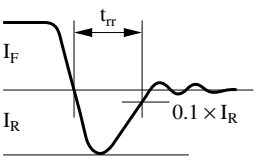
Note) *1 : $T_C = 25°C$
*2 : Half sine-wave; 10 ms/cycle

■ Electrical Characteristics $T_a = 25°C$

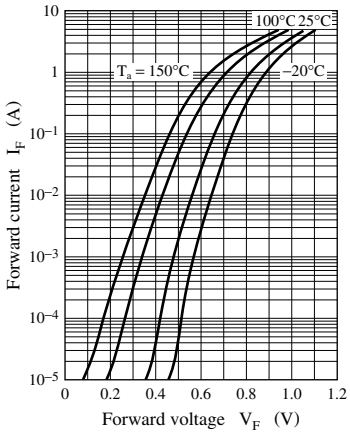
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Repetitive peak reverse current	I_{RRM1}	V_{RRM} = 200 V, $T_C = 25°C$			20	μA
	I_{RRM2}	V_{RRM} = 200 V, $T_j = 150°C$			2	mA
Forward voltage (DC)	V_F	I_F = 2.5 A, $T_C = 25°C$			0.98	V
Reverse recovery time*2	t_{rr}	I_F = 1 A, I_R = 1 A			40	ns
Thermal resistance*1	$R_{th(j-c)}$	Direct current (between junction and case)			12.5	°C/W

Note) 1. Rated input/output frequency: 10 MHz
2. *1 : $T_C = 25°C$
*2 : t_{rr} measuring circuit

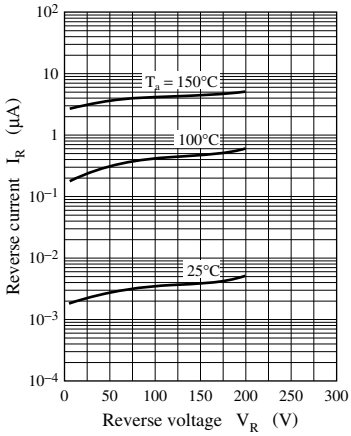




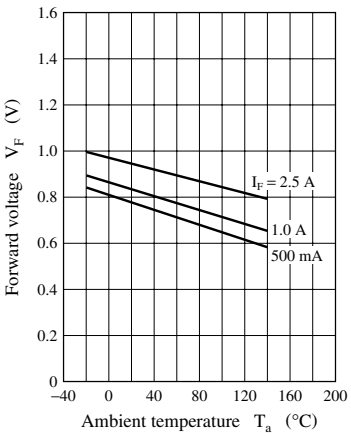
I_F — V_F



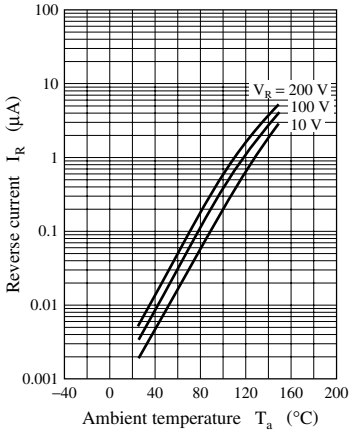
I_R — V_R



V_F — T_a



I_R — T_a



C_t — V_R