

MA3U690

Silicon planer type

For high-frequency rectification

■ Features

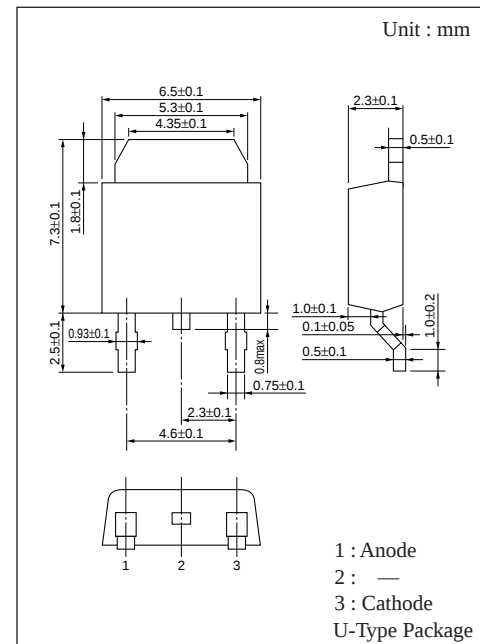
- Small U-type package and surface mounting
- Low-loss type with fast reverse recovery time t_{rr}
- Single type

■ Absolute Maximum Ratings (Ta= 25°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	$I_{F(AV)}^{*1}$	5	A
Non-repetitive peak forward surge current	I_{FSM}^{*2}	40	A
Junction temperature	T_j	− 40 to +150	°C
Storage temperature	T_{stg}	− 40 to +150	°C

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

*2 Sine half wave : 10ms/cycle



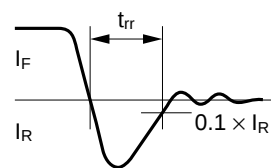
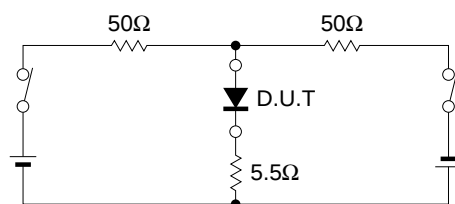
■ Electrical Characteristics (Ta= 25°C)

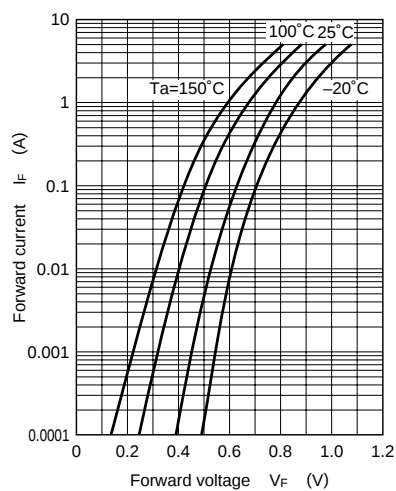
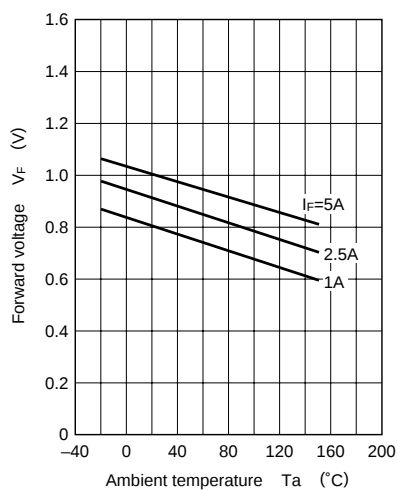
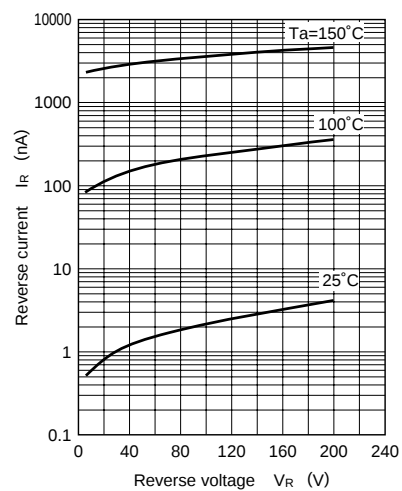
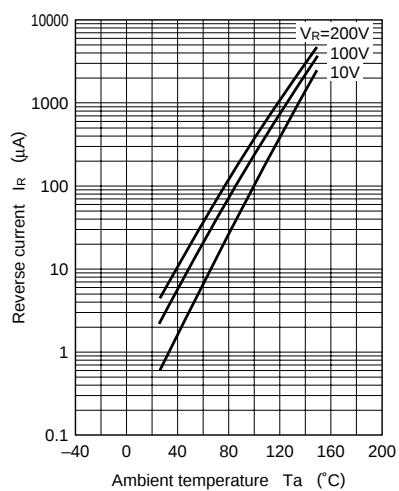
Parameter	Symbol	Condition	min	typ	max	Unit
Repetitive peak reverse current	I_{RRM1}	$V_{RRM} = 200\text{V}, T_C = 25^\circ\text{C}$			20	μA
	I_{RRM2}	$V_{RRM} = 200\text{V}, T_j = 150^\circ\text{C}$			2	mA
Forward voltage (DC)	V_F	$I_F = 5\text{A}, T_C = 25^\circ\text{C}$			0.98	V
Reverse recovery time	t_{rr}^{*2}	$I_F = 1\text{A}, I_R = 1\text{A}$			45	ns
Thermal resistance	$R_{th(j-c)}^{*1}$	Flat direct current between junction and case			12.5	°C/W

Note 1. Rated input/output frequency : 200MHz

2. *1 : $T_C = 25^\circ\text{C}$

3. *2 : t_{rr} measuring circuit



$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $C_t - V_R$ 