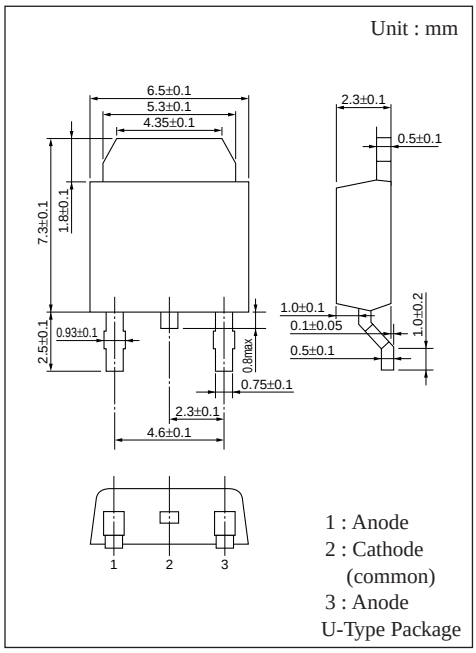
MA3U649

Silicon planer type (cathode common)

For high-frequency rectification



■ Features

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

■ Absolute Maximum Ratings (Ta= 25˚C)

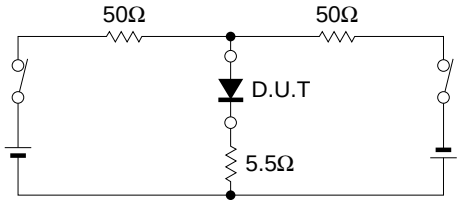
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	V
Non-repetitive peak reverse voltage	V_{RSM}	200	V
Average forward current	$I_{F(AV)}$*1	5	A
Non-repetitive peak forward surge current	I_{FSM}*2	40	A
Junction temperature	T_j	– 40 to +150	˚C
Storage temperature	T_{stg}	– 40 to +150	˚C

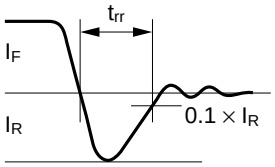
*1 T_C= 25˚C
*2 Sine half wave : 10ms/cycle

■ Electrical Characteristics (Ta= 25˚C)

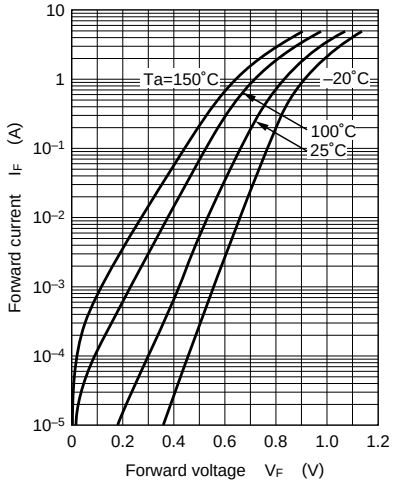
Parameter	Symbol	Condition	min	typ	max	Unit
Repetitive peak reverse current	I_{RRM1}	V_{RRM}= 200V, T_C= 25˚C			20	μA
	I_{RRM2}	V_{RRM}= 200V, T_j=150˚C			2	mA
Forward voltage (DC)	V_F	I_F= 2.5A, T_C= 25˚C			0.98	V
Reverse recovery time	t_{rr}*2	I_F=1A, I_R=1A			30	ns
Thermal resistance	$R_{th(j-c)}$*1	Flat direct current between junction and case			12.5	˚C/W

Note 1. Rated input/output frequency : 200MHz
2. *1 T_C= 25˚C
*2 t_{rr} measuring circuit

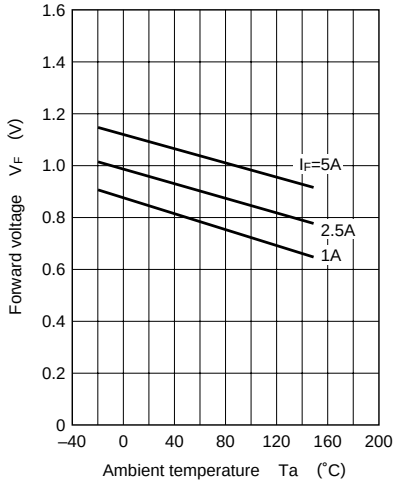




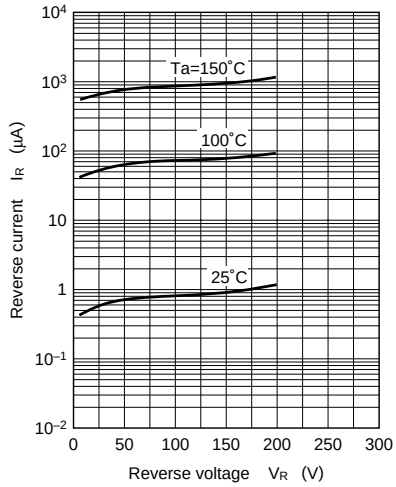
$I_F - V_F$



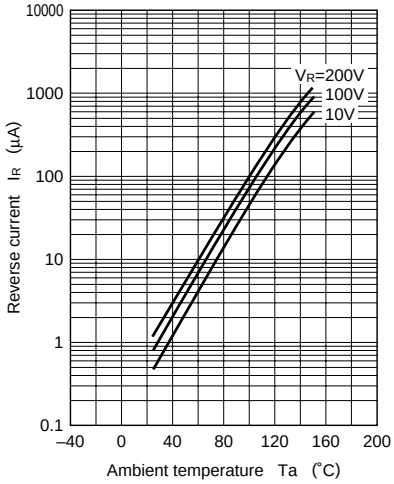
$V_F - Ta$



$I_R - V_R$



$I_R - Ta$



$C_t - V_R$