

MA3U649

Silicon planar type (cathode common)

For high-frequency rectification

■ Features

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

■ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	V
Non-repetitive peak reverse surge voltage	V_{RSM}	200	V
Forward current (Average) *1	$I_{F(AV)}$	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: $T_C = 25^\circ\text{C}$

*2: Half sine-wave; 10 ms/cycle

■ Package

- Code
U-G2
- Pin Name
1: Anode
2: Cathode (Common)
3: Anode

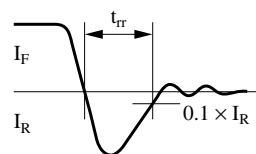
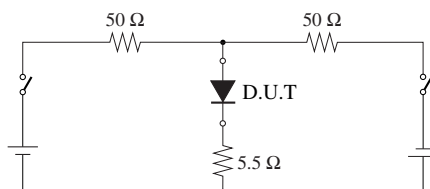
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

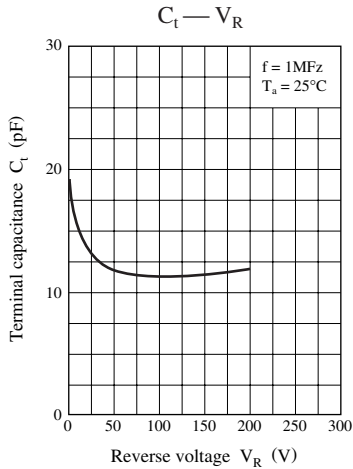
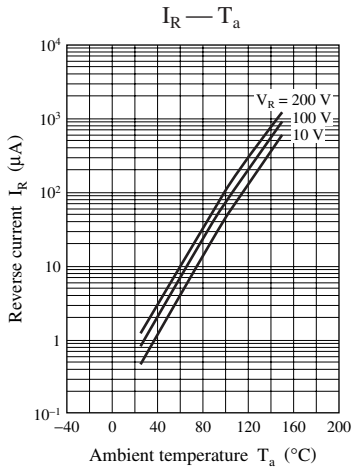
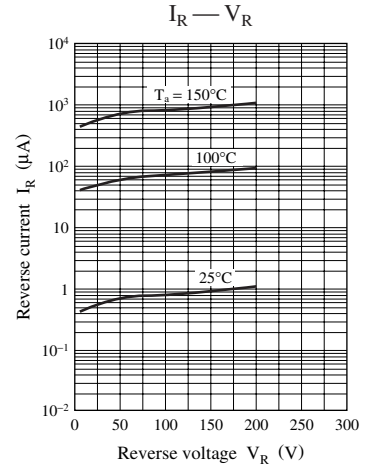
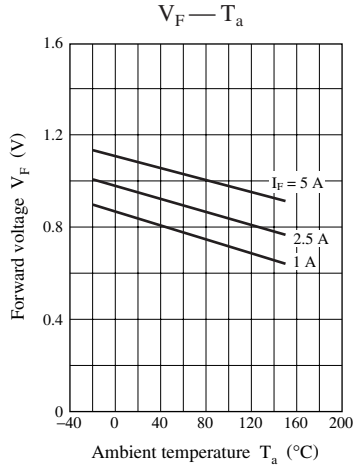
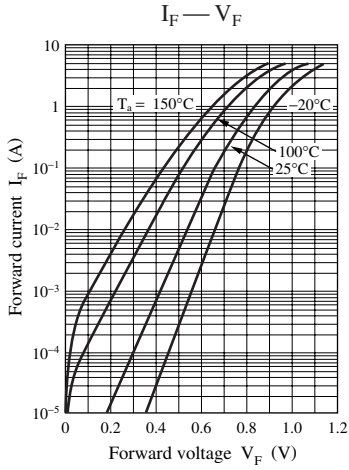
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 2.5 \text{ A}$, $T_C = 25^\circ\text{C}$			0.98	V
Repetitive peak reverse current	I_{RRM1}	$V_{RRM} = 200 \text{ V}$, $T_C = 25^\circ\text{C}$			20	μA
	I_{RRM2}	$V_{RRM} = 200 \text{ V}$, $T_j = 150^\circ\text{C}$			2	mA
Reverse recovery time *2	t_{rr}	$I_F = 1 \text{ A}$, $I_R = 1 \text{ A}$			30	ns
Thermal resistance (j-c) *1	$R_{th(j-c)}$				12.5	°C/W

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

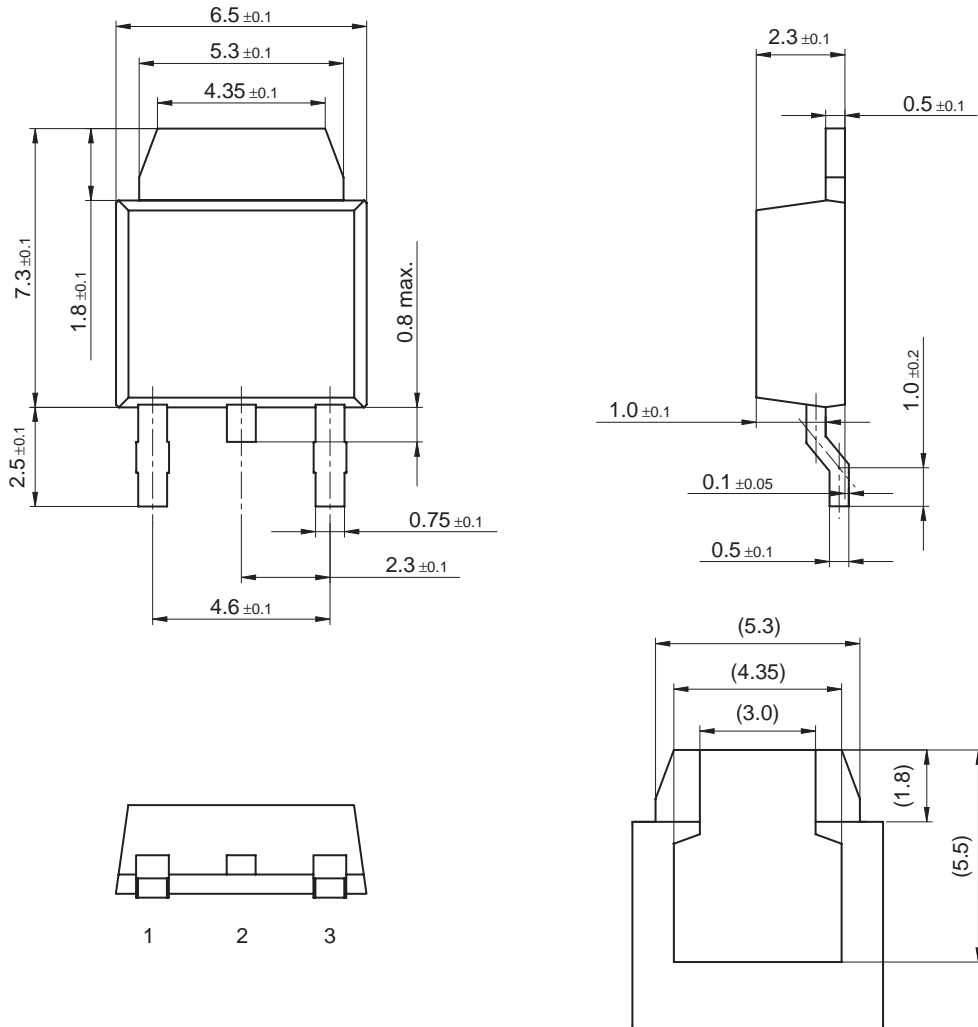
*2: t_{rr} measurement circuit





U-G2

Unit: mm



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