

Fast recovery diode

RF071M2S

●Applications

High frequency rectification

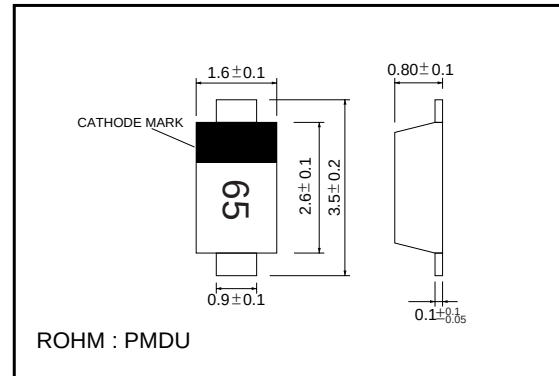
●Features

- 1) Small power mold type (PMDS)
- 2) Ultra low V_F
- 3) Very fast recovery
- 4) Low switching loss

●Construction

Silicon epitaxial planar

●External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	200	V
Reverse voltage (DC)	V_R	200	V
Forward voltage (DC)	I_F *	1.0	A
Average rectified forward current	I_o *	0.7	A
Forward peak surge current (60Hz · 1cyc.)	I_{FSM}	15	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

* Mounting on glass epoxi board

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.790	0.850	V	$I_F=0.7A$
Reverse current	I_R	—	10n	10μ	A	$V_R=200V$
Reverse recovery time	t_{rr}	—	ns	25	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25 \times I_R$

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta=25°C)

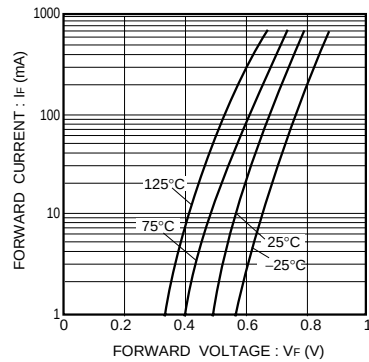


Fig.1 Forward temperature characteristics

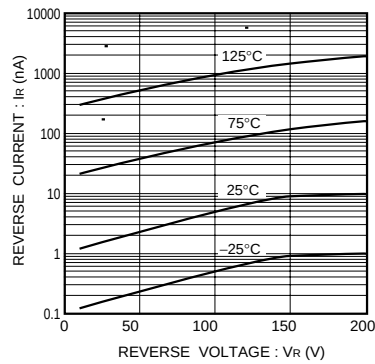


Fig.2 Reverse temperature characteristics

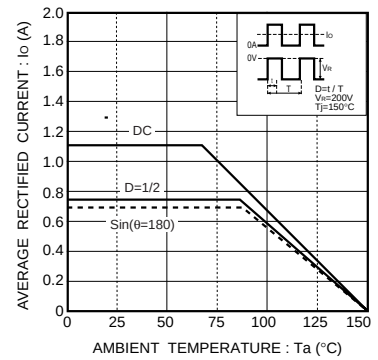


Fig.3 Derating curve

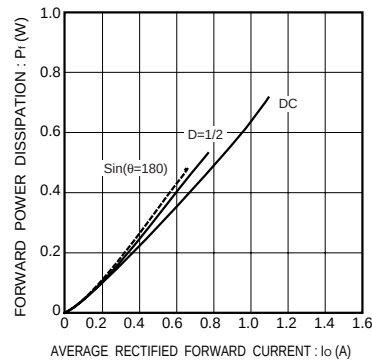


Fig. 4 Power dissipation characteristics

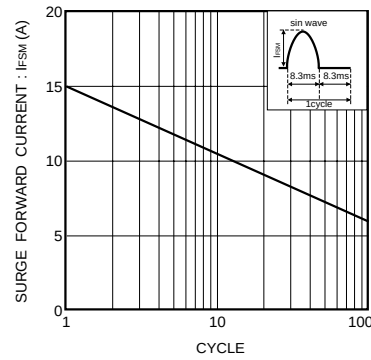


Fig.5 Forward peak surge current

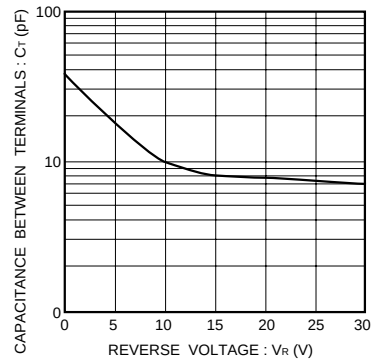


Fig. 6 Capacitance between terminals characteristics

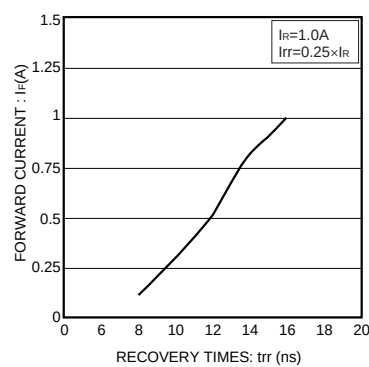


Fig. 7 Reverse recovery time