Rectifier diode

1SR159-400

●**Applications**

High frequency rectification.
For switching power supply.

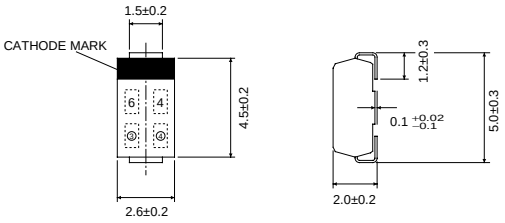
●**Features**

1) Small surface mounting type. (PMDS)
2) Low V_F. (V_F=1.10V Typ. at 1A)
3) High speed. (t_{rr}=10ns Typ.)

●**Construction**

Silicon epitaxial planar

●**External dimensions** (Units : mm)



ROHM : PMDS
EIAJ : –
JEDEC : SOD-106 ①, ② ··· Date code EX. 1999.1→9.1

●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Absolute peak reverse voltage	V_{RSM}	400	V
Peak reverse voltage	V_{RM}	400	V
Mean rectifying current ∗	I_O	1	A
Peak forward surge current (60Hz·1∿)	I_{FSM}	20	A
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−40~+150	°C

∗ 180° half sine wave when mounted on glass epoxy PCBs.

●**Electrical characteristics** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	–	1.2	V	I_F=1.0A
Reverse current	I_R	–	–	10	μA	V_R=400V
Reverse recovery time	t_{rr}	–	–	25	ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25×I_R

●**Electrical characteristic curves** (Ta=25°C)

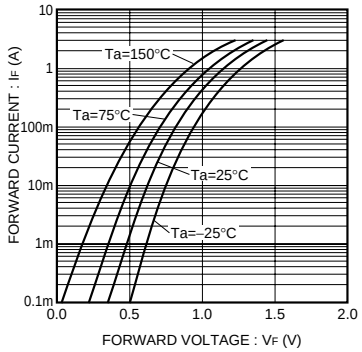


Fig.1 Forward characteristics

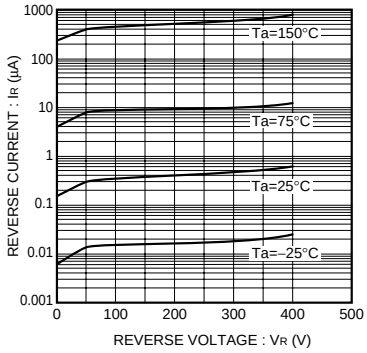


Fig.2 Reverse characteristics

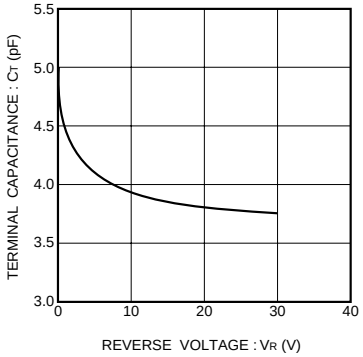


Fig.3 Capacitance between terminals characteristics

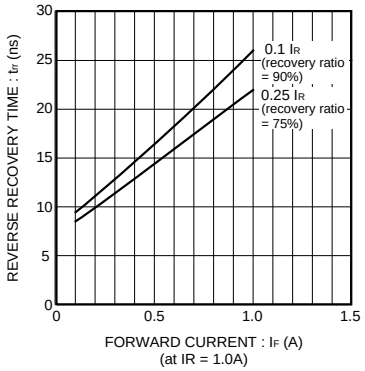


Fig.4 Reverse recovery time characteristics