

Rectifier diode

1SR159-400

●Applications

High frequency rectification.
For switching power supply.

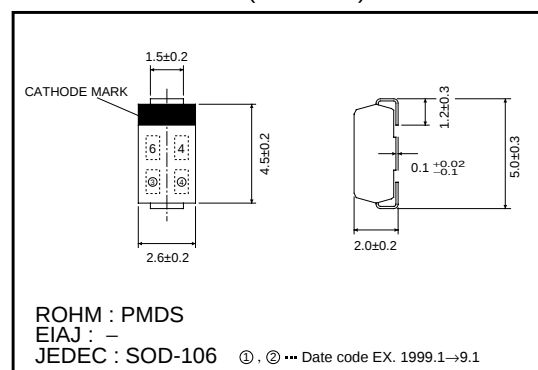
●Features

- 1) Small surface mounting type. (PMDS)
- 2) Low V_F . ($V_F=1.10V$ Typ. at 1A)
- 3) High speed. ($t_r=10ns$ Typ.)

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings ($T_a=25^\circ C$)

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 $\cdot$ 1 $\sim$)	I_{FSM}	20	A
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-40~+150	$^\circ C$

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

●Electrical characteristics ($T_a=25^\circ C$)

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	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25 \times I_R$

Diodes

●Electrical characteristic curves ($T_a=25^\circ\text{C}$)