High–speed rectifier diode
1SR156–400

●Applications

High speed rectification

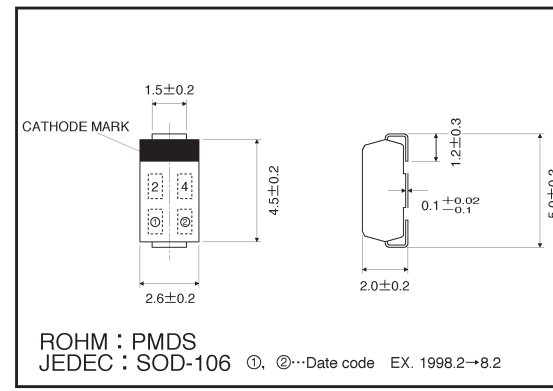
●Features

1) Small surface mounting type. (PMDS)
2) High reliability.
3) Peak reverse voltage is 400V even at high speed.

●Construction

Silicon diffused junction

●External dimensions (Units: mm)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Absolute peak reverse voltage	V_{RSM}	500	V
Peak reverse voltage	V_{RM}	400	V
Mean rectifying current	I_O	1.0	A
Peak forward surge current *	I_{FSM}	20	A
Junction temperature	Tj	150	℃
Storage temperature	Tstg	−55～+150	℃

* 60 Hz for 1 ∿

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	1.13	1.3	V	I_F=0.8A
Reverse current	I_R	—	0.05	10	μA	V_R=400V
Reverse recovery time	t_{rr}	—	0.2	0.4	μs	I_F=I_R=10mA, I_{rr}=1mA

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

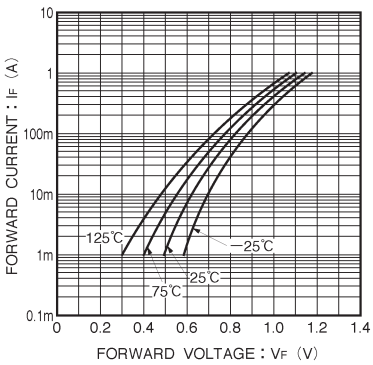


Fig. 1 Forward characteristics

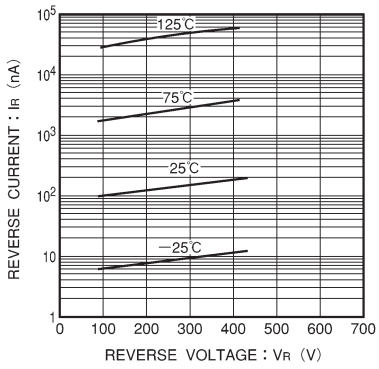


Fig. 2 Reverse characteristics

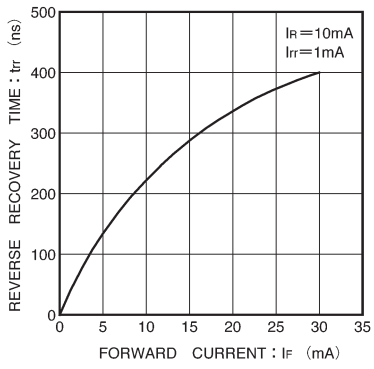


Fig. 3 Reverse recovery time characteristics

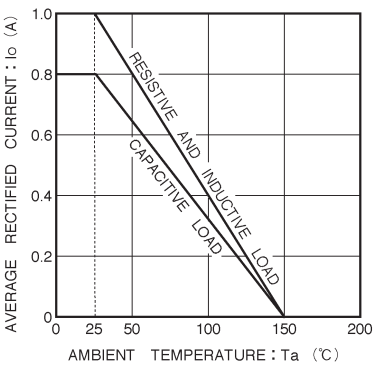


Fig. 4 Derating curve

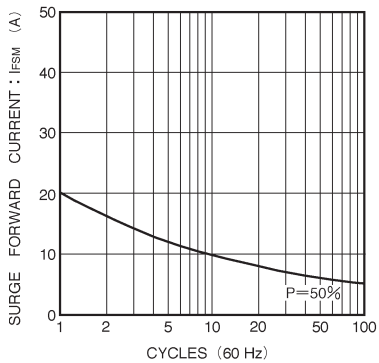


Fig. 5 Maximum peak forward surge current characteristics

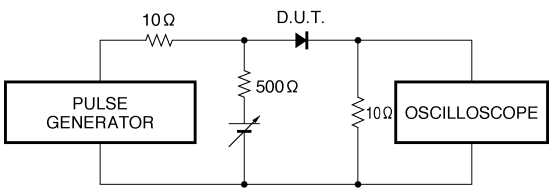


Fig. 6 Reverse recovery time (t_{rr}) measurement circuit