

General purpose rectifier diode (mold type)

1SR139-400 / 1SR139-600

●Applications

- 1) General purpose rectification
- 2) Surge absorption

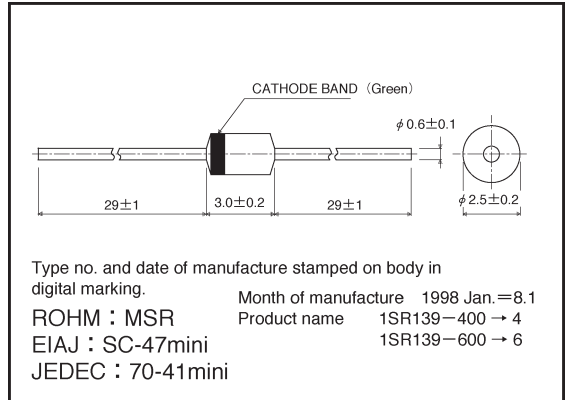
●Features

- 1) Cylindrical mold. (MSR)
- 2) High reliability.
- 3) Outstanding reverse surge capability.

●Construction

Silicon diffused junction

●External dimensions (Units: mm)



●Absolute maximum ratings (Ta = 25°C)

Parameter		Symbol	Limits	Unit
Absolute peak reverse voltage	1SR139-400	V_{RSM}	500	V
	1SR139-600		750	
Peak reverse voltage	1SR139-400	V_{RM}	400	V
	1SR139-600		600	
Mean rectifying current		I_o	1.0	A
Peak forward surge current *		I_{FSM}	40	A
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	-40 ~ +150	°C

* 60 Hz for 1 μ s

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.95	1.1	V	$I_F = 1.0A$
Reverse current	1SR139-400	—	0.020	10	μA	$V_R = 400V$
	1SR139-600	—	0.030	10		$V_R = 600V$

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

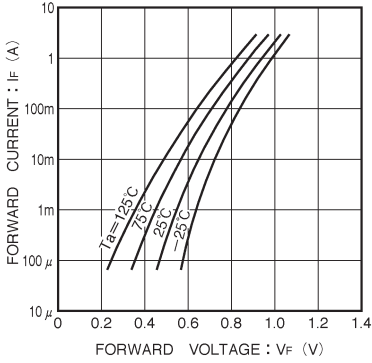


Fig. 1 Forward characteristics

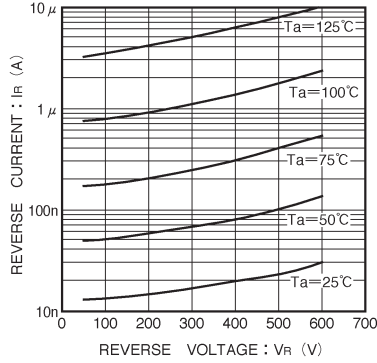


Fig. 2 Reverse characteristics

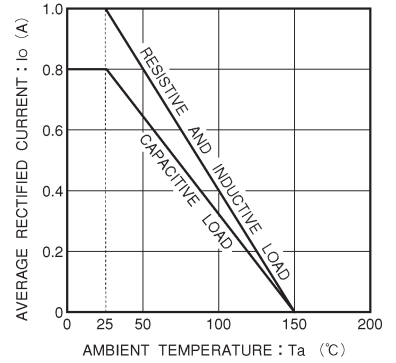


Fig. 3 Derating curve

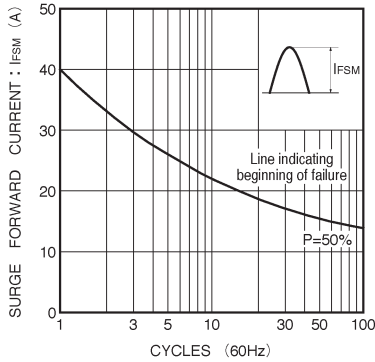


Fig. 4 Surge current characteristics