

General Purpose Rectifier Diode (Mold Type)

1SR139-400/1SR139-600

●Applications

- 1) General purpose rectification
- 2) Surge absorption

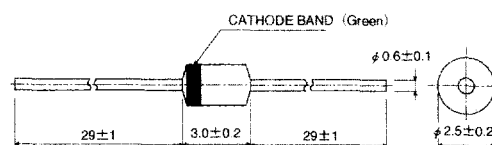
●Features

- 1) Cylindrical mold
- 2) High reliability

●Construction

Silicon diffused junction

●External dimensions (Units: mm)



Type no. and date of manufacture stamped on body in digital marking.

MSR

Month of manufacture 1994.12 → 4N
Product name 1SR139-400 → 4
1SR139-600 → 6

●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 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	I_R	—	0.020	10	μA	$V_R=400V$
	1SR139-600		—	0.030	10		$V_R=600V$

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

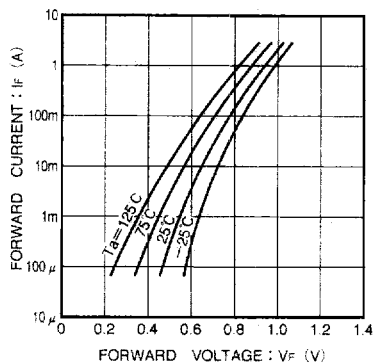


Fig. 1 Forward temperature characteristic

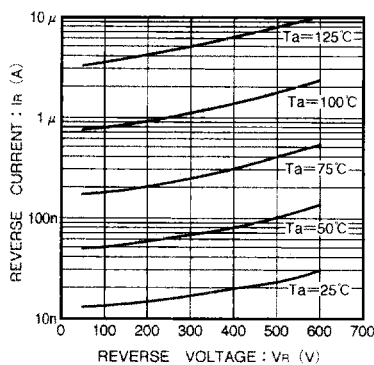


Fig. 2 Reverse temperature characteristic

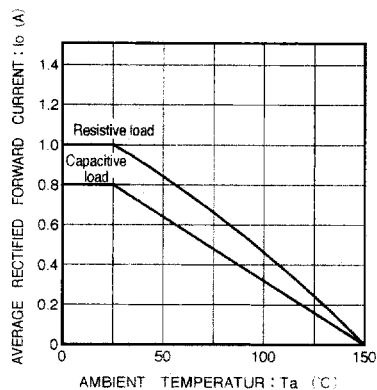


Fig. 3 Derating curve

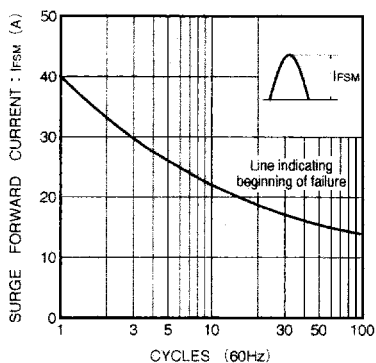


Fig. 4 Surge current characteristic