

# General purpose rectifier diode (mold type)

## 1SR139-400 / 1SR139-600

### ●Applications

- 1) General purpose rectification
- 2) Surge absorption

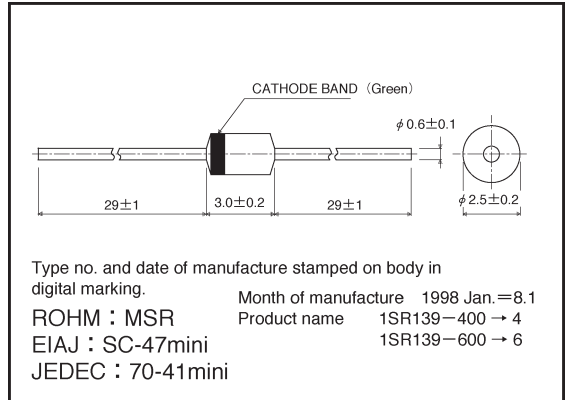
### ●Features

- 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  $\mu$ 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	$\mu A$	$V_R = 400V$
	1SR139-600	—	0.030	10		$V_R = 600V$

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

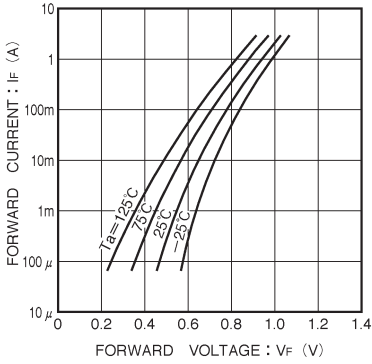


Fig. 1 Forward characteristics

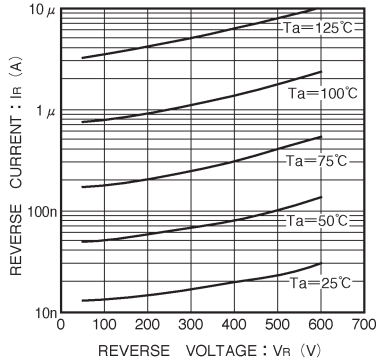


Fig. 2 Reverse characteristics

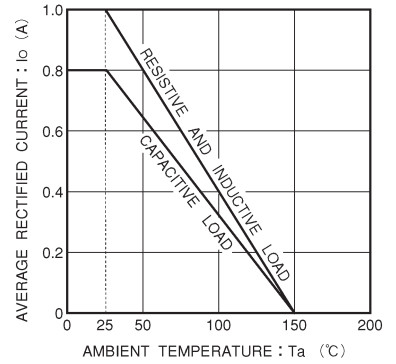


Fig. 3 Derating curve

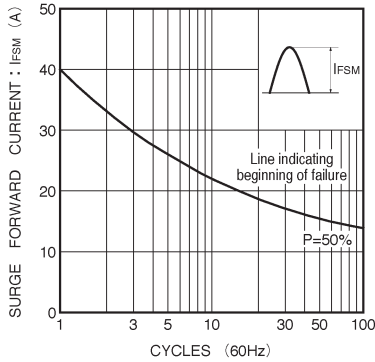


Fig. 4 Surge current characteristics