

Rectifier diode

1SR139-400 / 1SR139-600

●Applications

- 1) General purpose rectification
- 2) Surge absorption

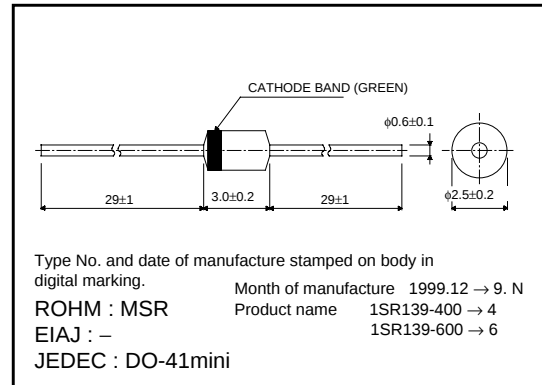
●Features

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

●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 $\varnothing$

●Electrical characteristics (Ta = 25°C)

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

Diodes

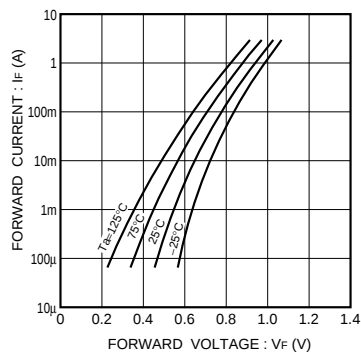
●Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

Fig. 1 Forward characteristics

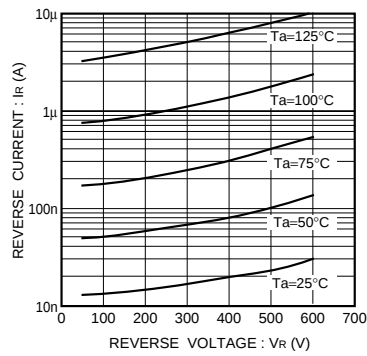


Fig. 2 Reverse characteristics

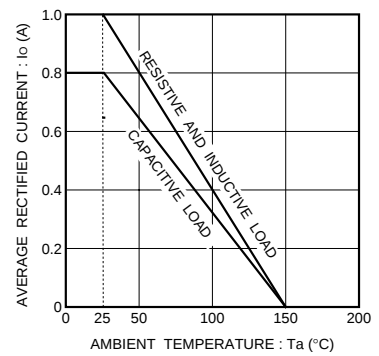


Fig. 3 Derating curve

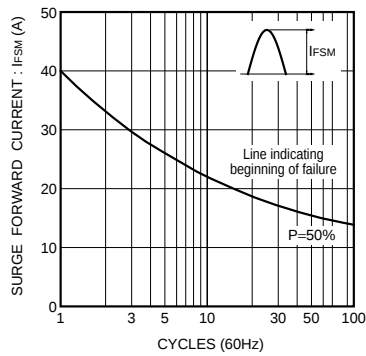


Fig. 4 Surge current characteristics