

# High-voltage switching diode

## 1SS244

### ●Applications

High voltage switching  
General purpose rectification

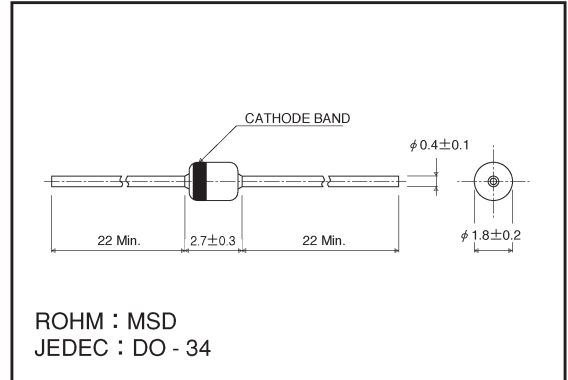
### ●Features

- 1) High reliability.
- 2) Glass sealed envelope. (MSD)
- 3)  $V_{RM}=250V$  Guaranteed.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units: mm)



### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	250	V
DC reverse voltage	$V_R$	220	V
Peak forward current	$I_{FM}$	625	mA
Mean rectifying current	$I_o$	200	mA
Surge current (1s)	$I_{surge}$	1000	mA
Power dissipation	P	300	mW
Junction temperature	$T_j$	175	°C
Storage temperature	$T_{stg}$	-65 ~ +175	°C

### ●Cathode band colors

Type	Color
1SS244	Black

### ●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	1.13	1.5	V	$I_F=200mA$
Reverse current	$I_R$	—	0.05	10	$\mu A$	$V_R=220V$
Capacitance between terminals	$C_T$	—	0.95	3	pF	$V_R=0V, f=1MHz$
Reverse recovery time	$t_{rr}$	—	—	75	ns	$I_F=20mA, I_R=20mA, R_L=50\Omega$

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

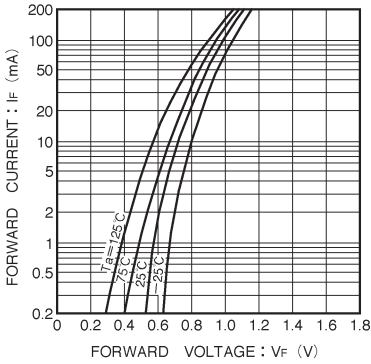


Fig. 1 Forward characteristics

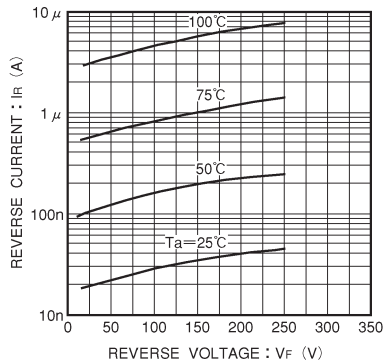


Fig. 2 Reverse characteristics

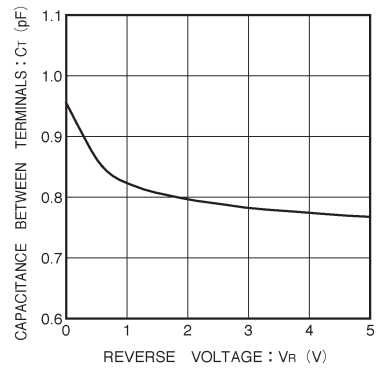


Fig. 3 Capacitance between terminals characteristics

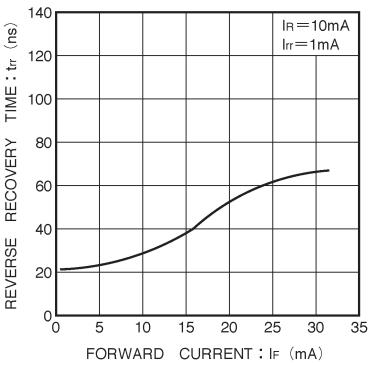


Fig. 4 Reverse recovery time characteristics

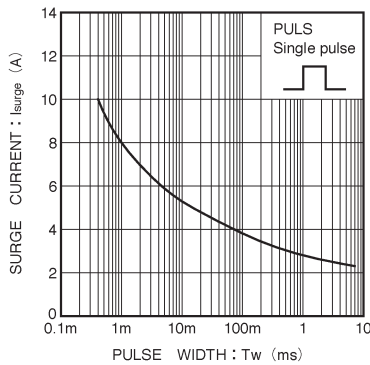


Fig. 5 Surge current characteristics

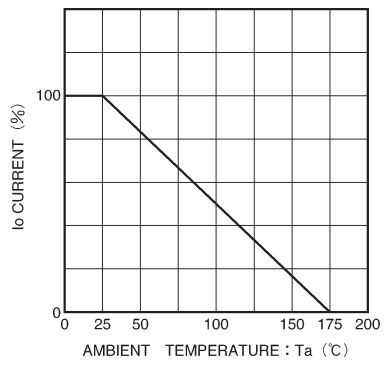


Fig. 6 Derating curve (mounting on glass epoxy PCBs)

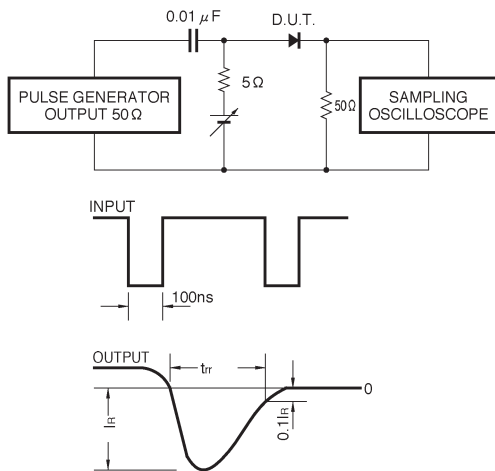


Fig. 7 Reverse recovery time ( $t_{rr}$ ) measurement circuit