

High Speed Switching Diodes

Pb Lead(Pb)-Free

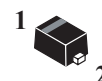
Features:

- *Extremely High Switching Speed.
- *Low Reverse Leakage Current.
- *High Reliability.
- *Small Outline Surface Mount SOD-523 Package.

Applications:

- *High Speed Switching.

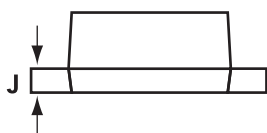
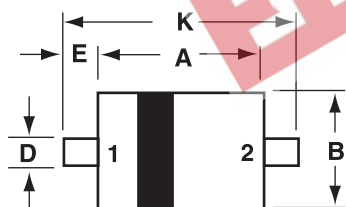
SWITCHING DIODE
100 mAMPERES
80 VOLTS



SOD-523

SOD-523 Outline Dimensions

Unit:mm



SOD-523		
Dim	Min	Max
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.07	0.20
K	1.50	1.70

PIN 1. CATHODE
2. ANODE

1SS387



Maximum Ratings (T_a=25°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	85	V
DC Reverse Voltage	V _R	80	V
Peak Forward Current	I _{FM}	200	mA
Mean Rectifying Current	I _o	100	mA
Peak Forward Surge Current @t=1S	I _{FSM}	1000	mA
Operating Junction Temperature Range	T _J	125	°C
Storage Temperature Range	T _{stg}	-55 to +125	

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage I _F =1 mA I _F =10 mA I _F =100 mA	V _{F1} V _{F2} V _{F3}	- - -	0.62 0.75 -	- - 1.2	V
Reverse Current V _R =30V V _R =80V	I _{R1} I _{R2}	- -	- -	0.1 0.5	uA
Capacitance Between Terminals V _R =0, f=1MHz	C _T	-	-	3.0	pF
Reverse Recovery Time V _R =6V, I _F =10mA, R _L =100Ω	T _{rr}	-	-	4.0	ns

Device Marking

Item	Marking	Equivalent Circuit diagram
1SS387	G	1 ○ — — ○ 2

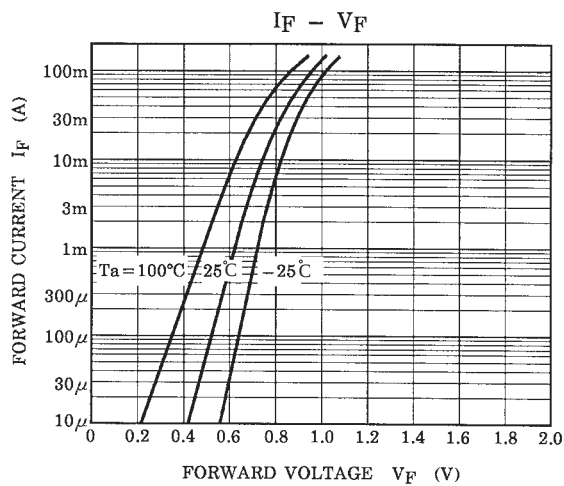


FIG.1 Forward Characteristics

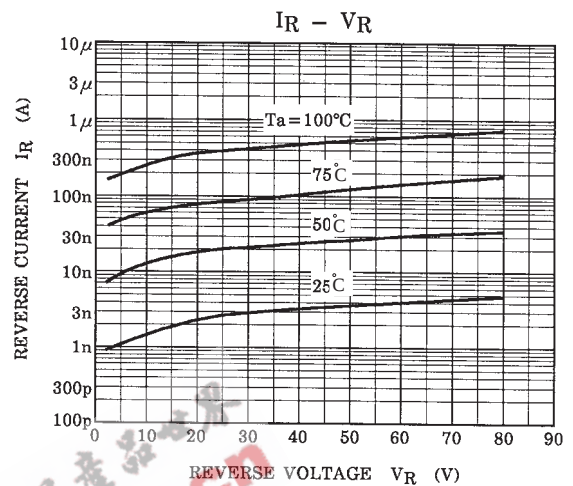


FIG.2 Reverse Characteristics

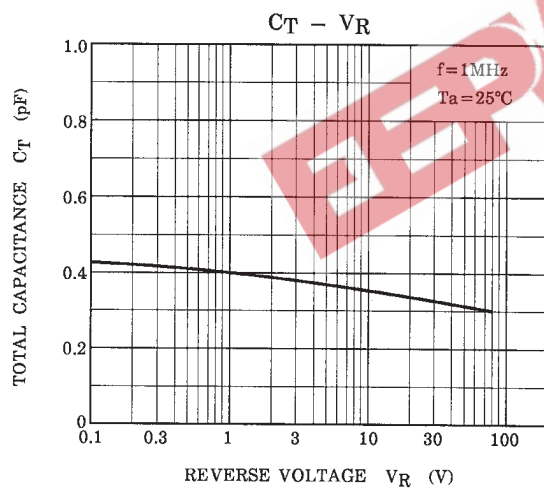


FIG.3 Capacitance Between Terminals

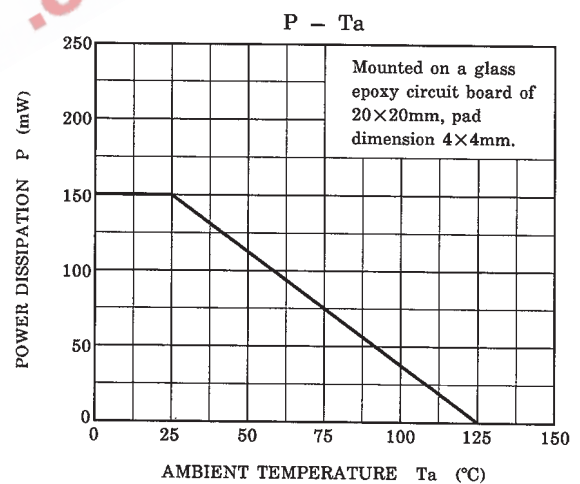


FIG.4 Power Derating Curve