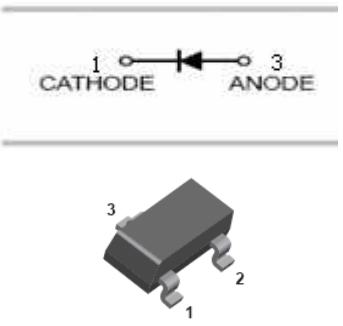
Surface mount switching diode 1SS187

FEATURES

- Low forward voltage
  V_F=0.92V(typ).
- Small total capacitance:C_T=2.2pF(typ).
- Fast reverse recovery time:t_{rr}=1.6ns(typ).

Lead-free



SOT-23

APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
1SS187	D3	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

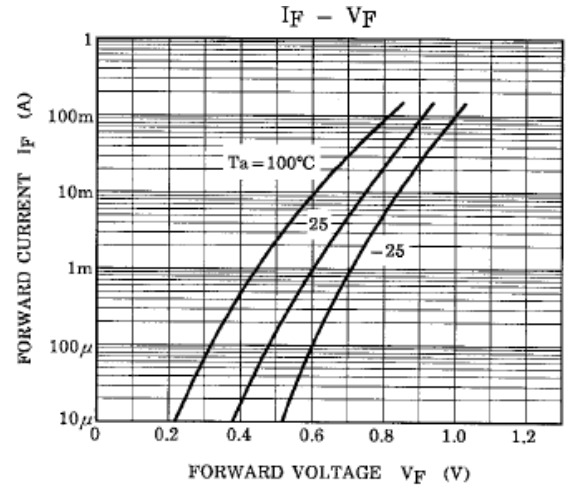
Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
DC Reverse Voltage	V_R	80	V
Forward Output current	I_o	100	mA
Surge current (10ms)	I_{FSM}	2	A
Power Dissipation	P_d	350	mW
Operating Junction Temperature Range	T_j	150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

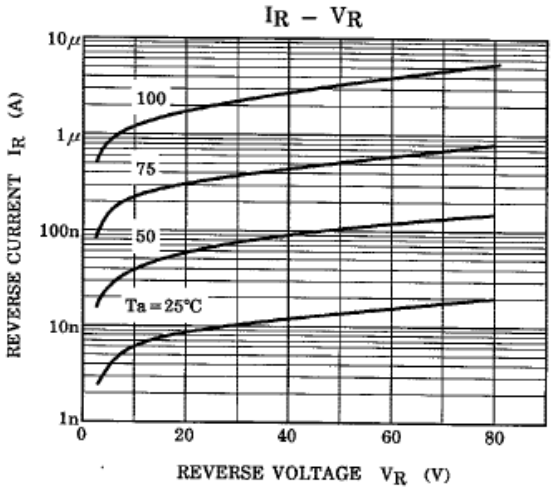
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

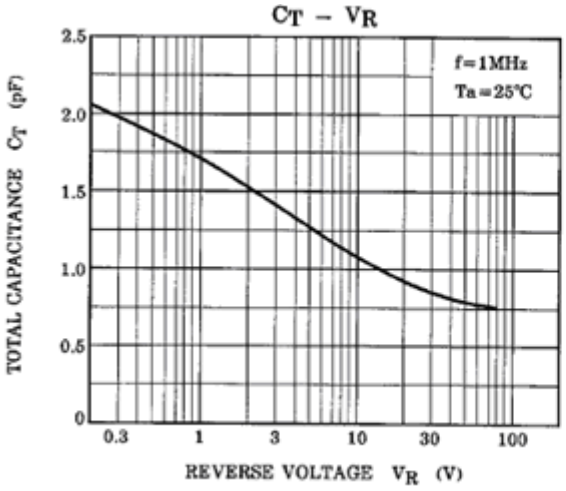
Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	I_R= 100μA
Forward Voltage	V_F	-	0.61 0.74 0.92	 1.2	V	I_F=1mA I_F=10mA I_F=100mA
Reverse Leakage Current	I_R	-		0.1 0.5	μA	V_R=30V V_R=80V
Total Capacitance	C_T	-	2.2	4.0	pF	V_R=0V,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	1.6	4.0	ns	I_F=I_R=10mAI_{rr}=0.1*I_R

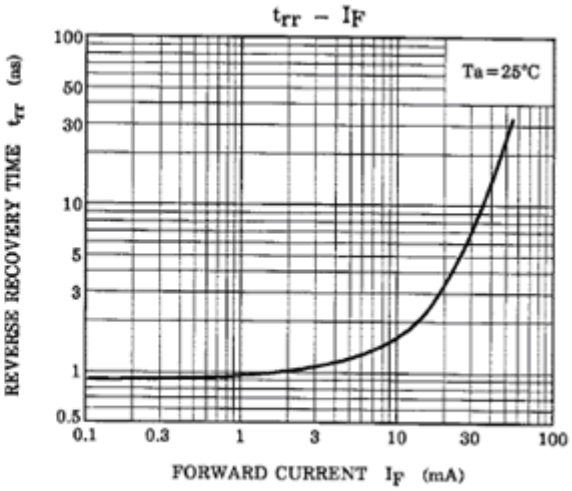
Surface mount switching diode **1SS187**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified





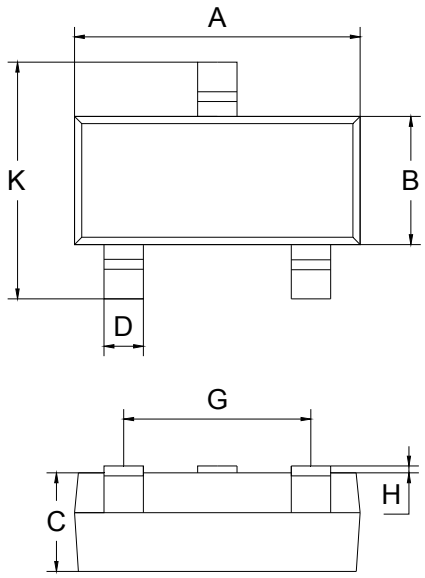




Surface mount switching diode **1SS187**

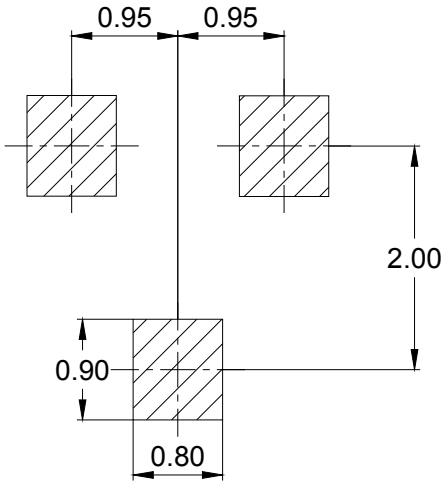
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
1SS187	SOT-23	3000/Tape&Reel