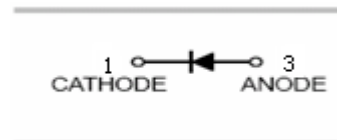


Surface Mount Switching Diode

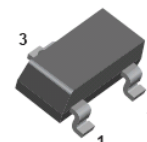
FEATURES

- 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.)



APPLICATIONS

- High speed switching application



SOT-23

ORDERING INFORMATION

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

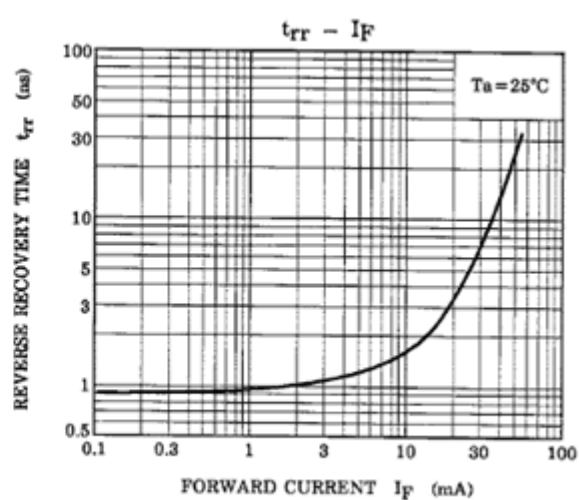
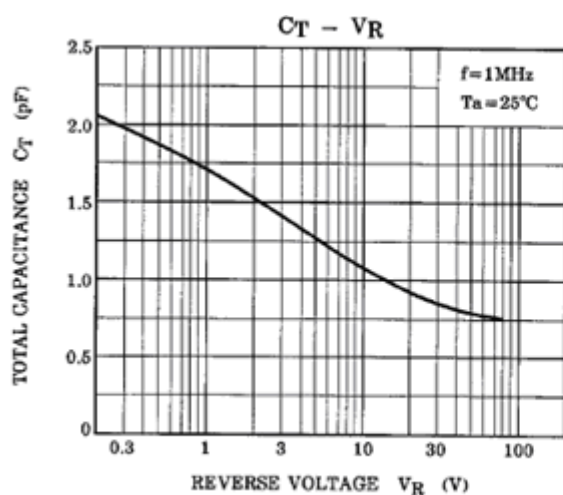
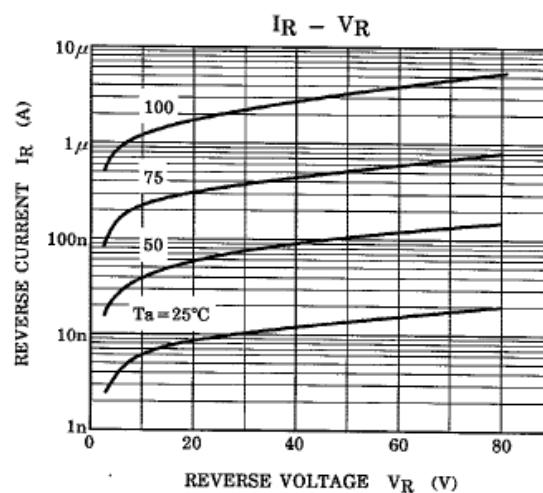
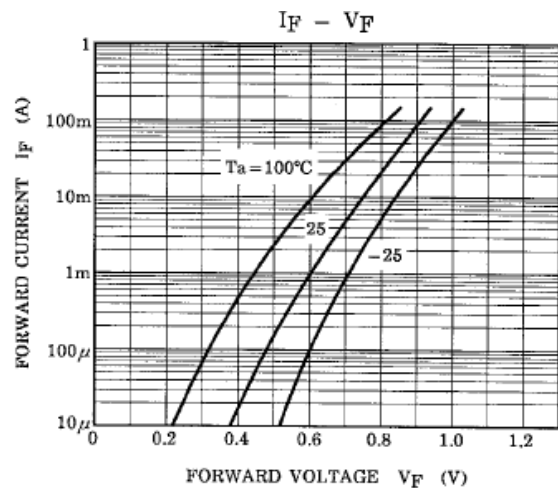
MAXIMUM RATING @ $T_a=25^\circ C$ unless otherwise specified

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	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ C$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

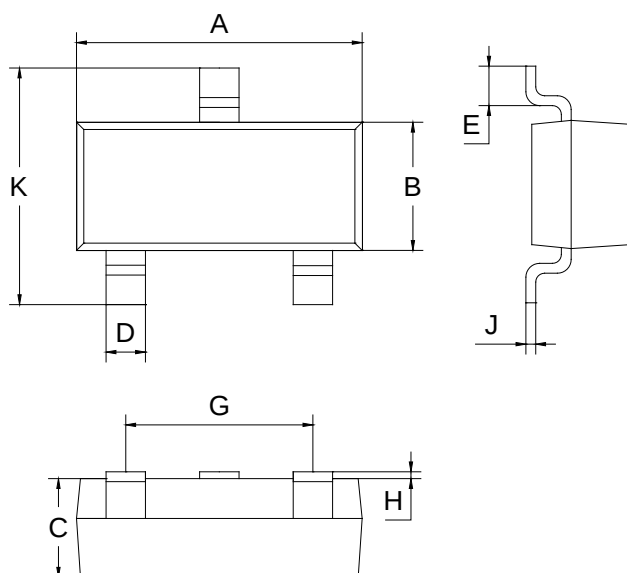
Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	$I_R = 100\mu A$
Forward Voltage	V_F	-	0.61 0.74 0.92	1.2	V	$I_F = 1mA$ $I_F = 10mA$ $I_F = 100mA$
Reverse Leakage Current	I_R	-		0.1 0.5	μA	$V_R = 30V$ $V_R = 80V$
Total Capacitance	C_T	-	2.2	4.0	pF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

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



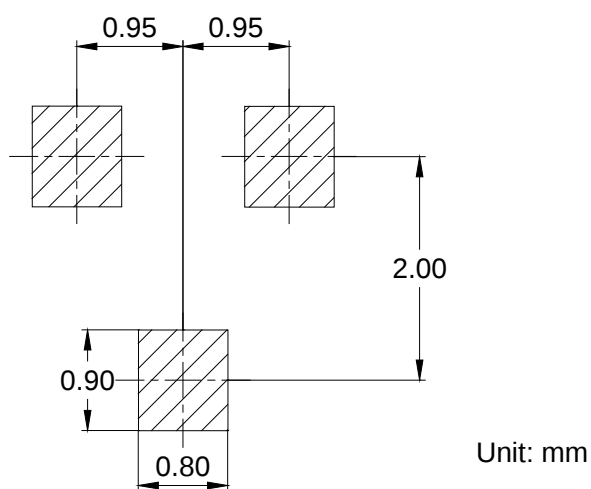
PACKAGE OUTLINE

Plastic surface mounted package



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

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