

Surface Mount Switching Diode

1SS187

FEATURES

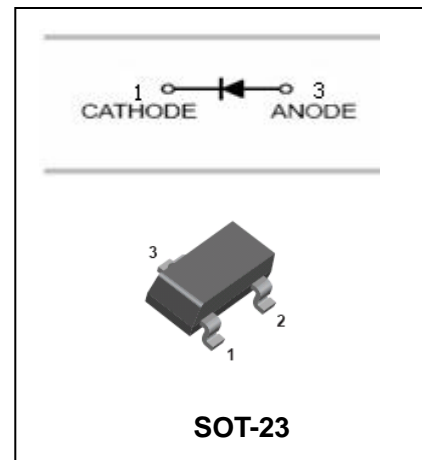
- Low forward voltage $V_F = 0.92V$ (typ.)
- Small total capacitance: $C_T = 2.2Pf$ (typ.)
- Fast reverse recovery time: $t_{rr} = 1.6ns$ (typ.)

APPLICATIONS

- High speed switching application

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	$^{\circ}C$

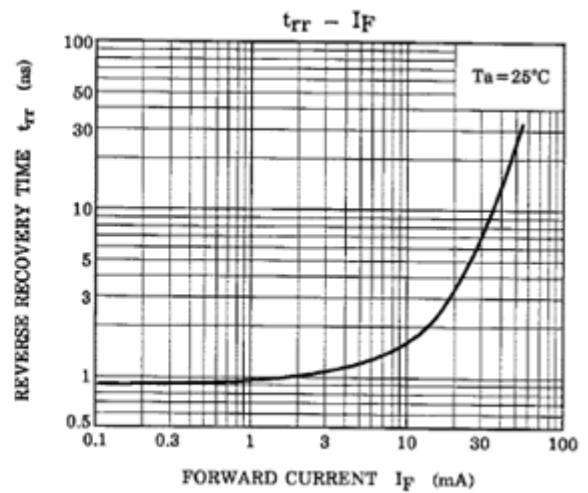
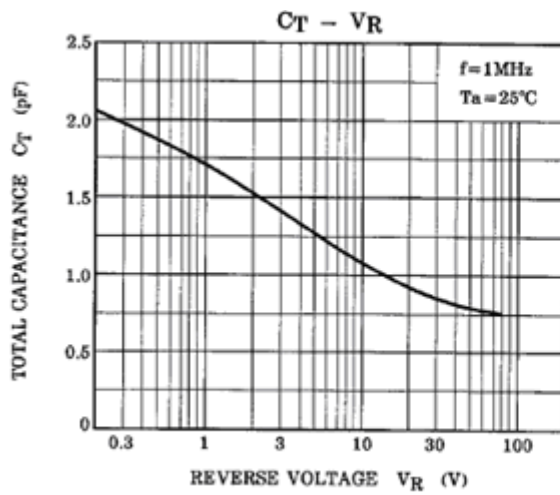
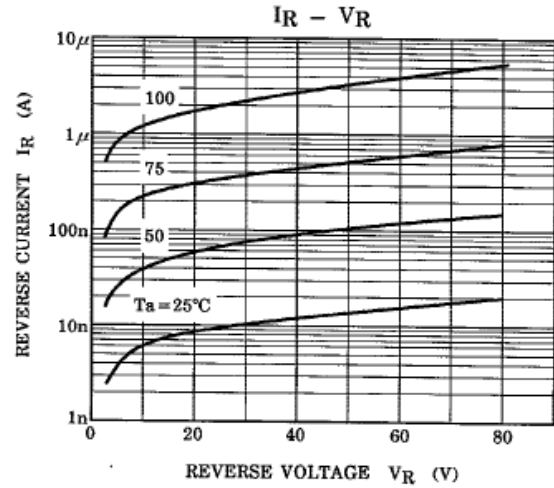
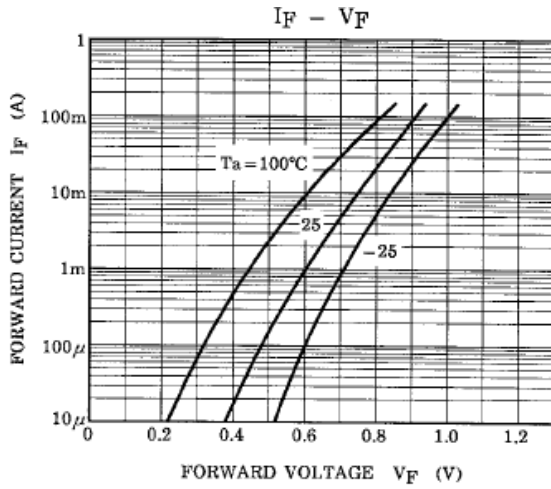
ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}C$ unless otherwise specified

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	$I_F = I_R = 10mA, I_{rr} = 0.1 * I_R$

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



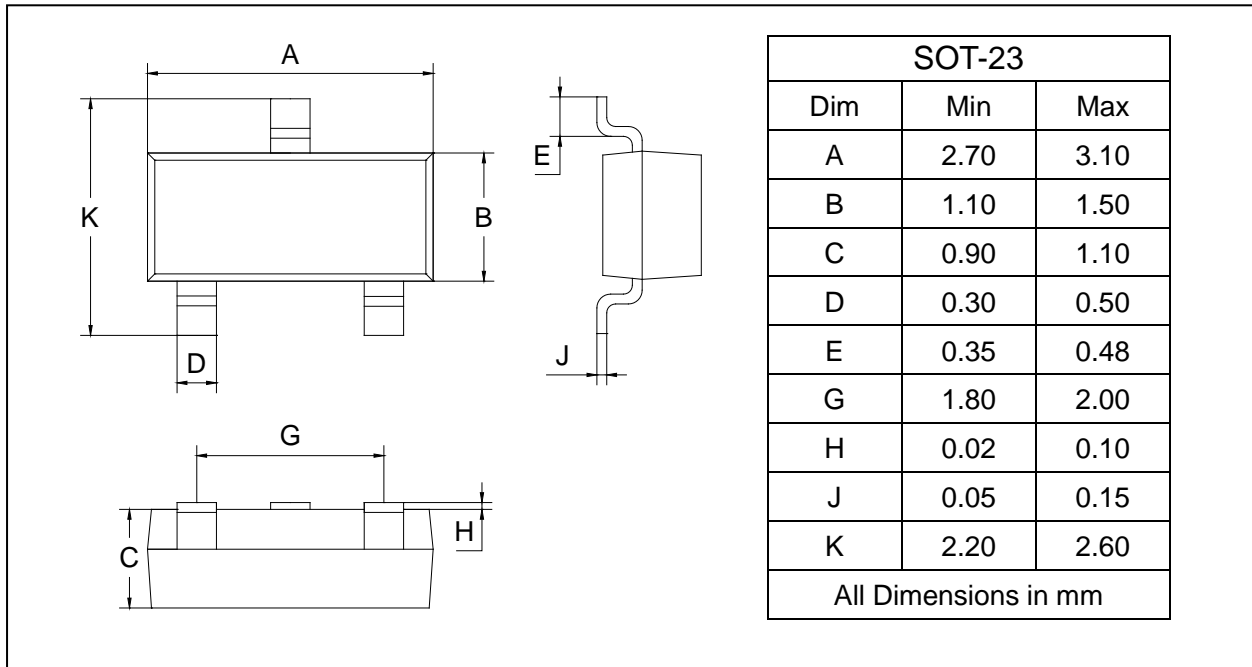
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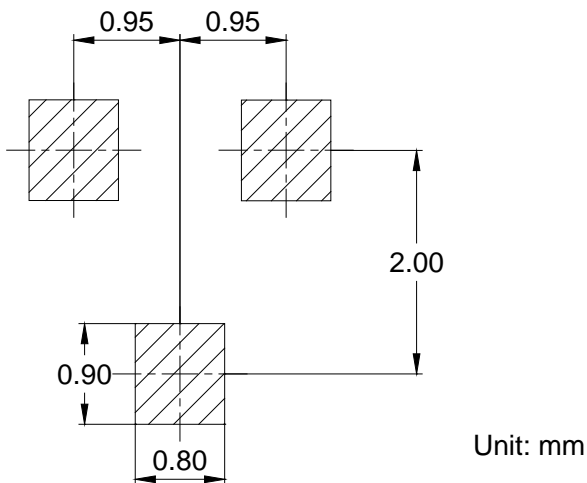
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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