

Surface mount switching diode

■ Features

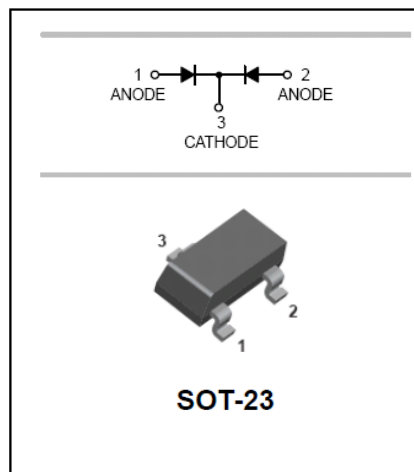
- V_R 80V
- I_O 100mA

■ Applications

- High speed switching application
- Low forward voltage

■ Marking B3

■ External and internal structure



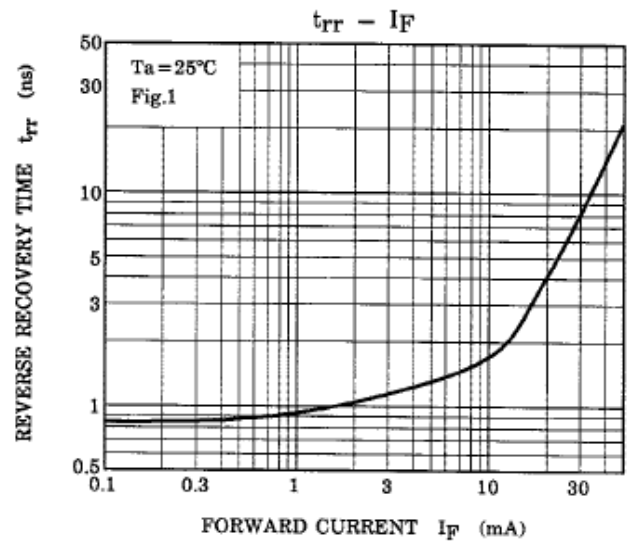
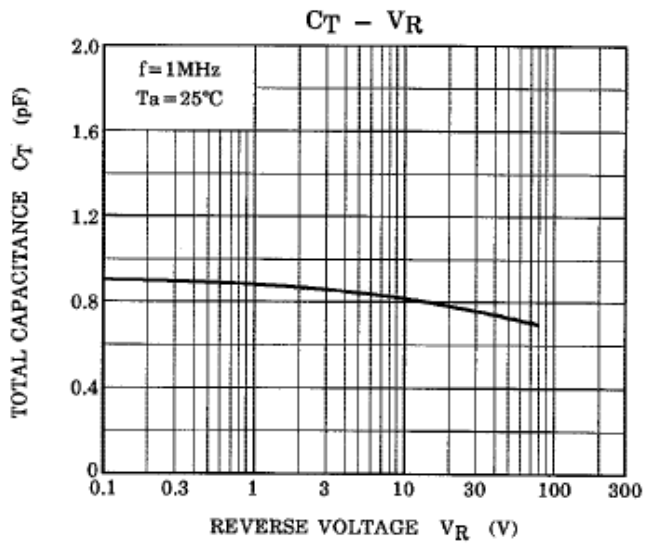
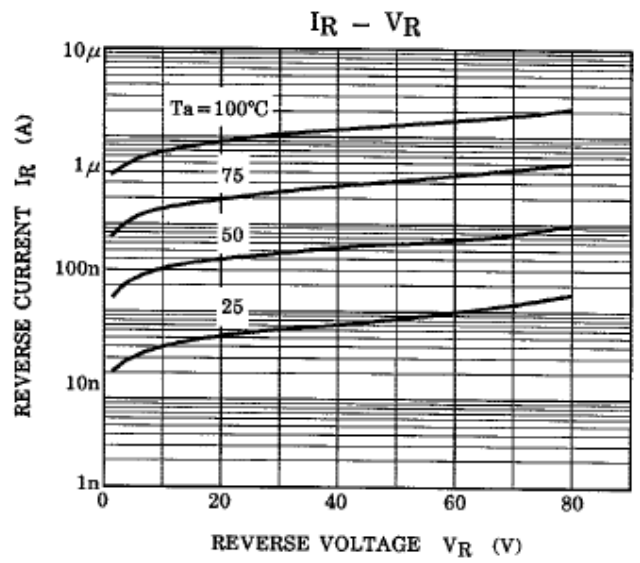
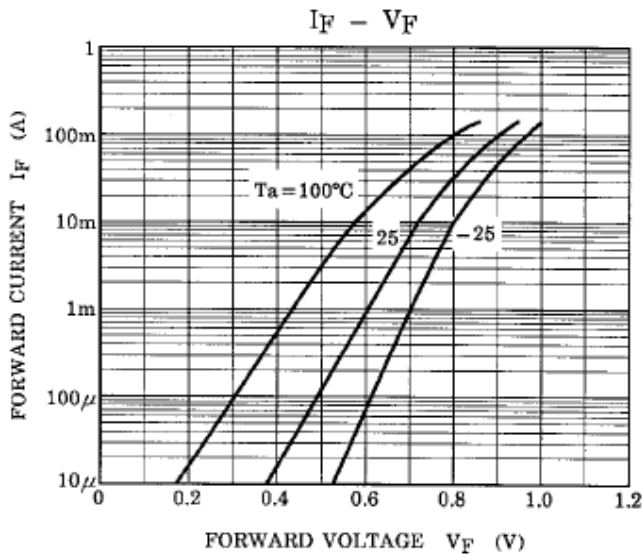
■ Limiting Values (Absolute Maximum Rating)

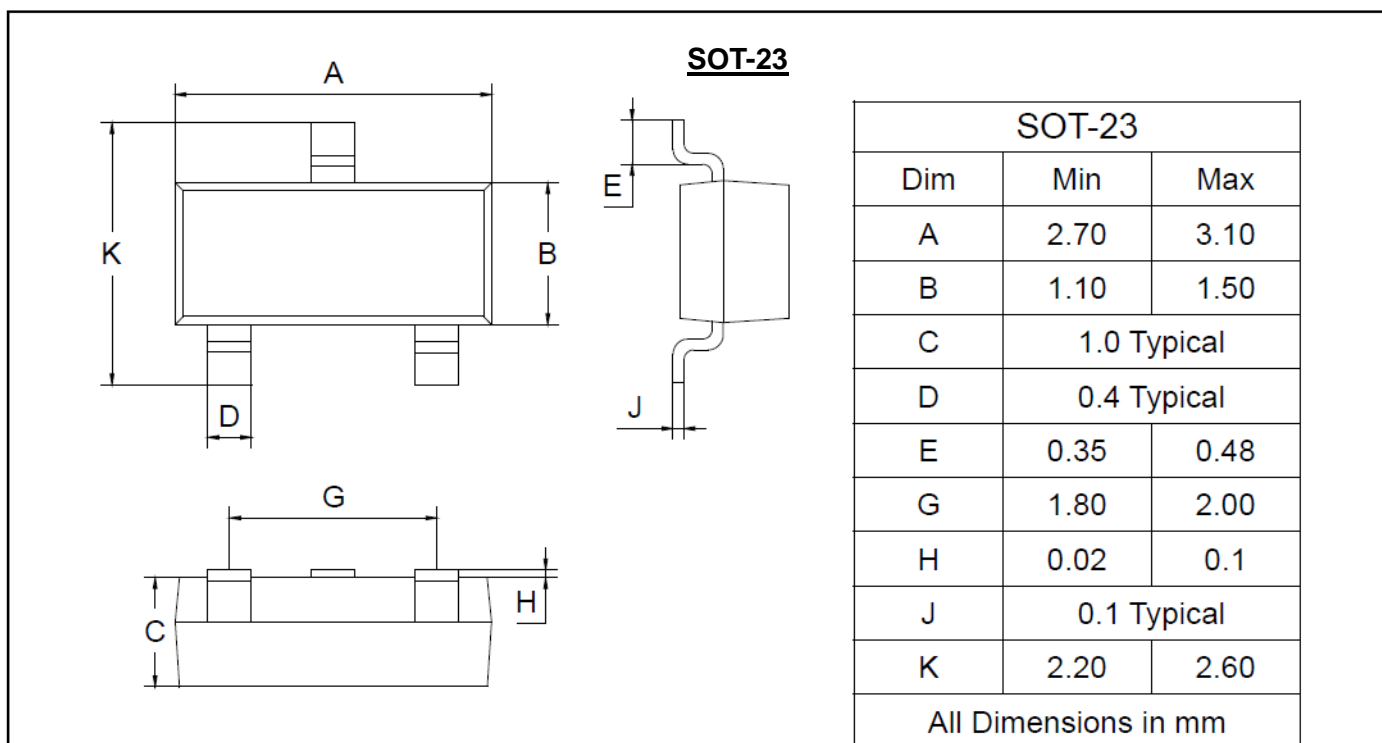
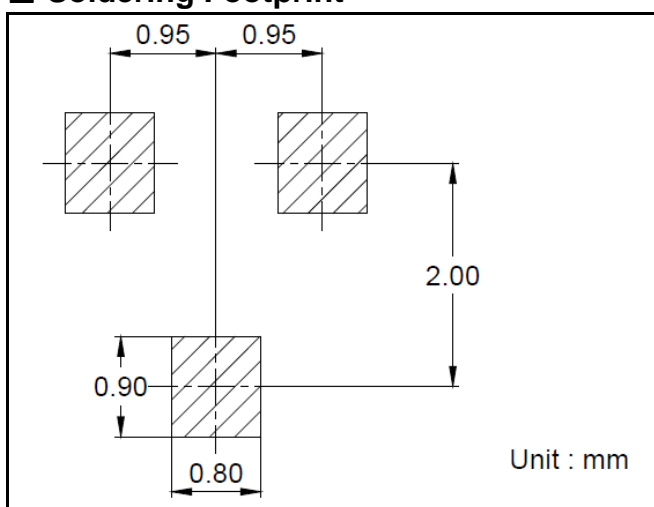
Item	Symbol	Unit	Conditions	Limit
Non-Repetitive Peak Reverse Voltage	VRM	V		85
DC Reverse Voltage	VR	V		80
Surge current (10ms)	IFSM	A		2
Forward Output current	I_o	mA		100
Power Dissipation	P_d	mW		150
Operating Junction Temperature Range	T_j	°C		125
Storage Temperature Range	TSTG	°C		-55 to +125

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Reverse Breakdown Voltage	V(BR)	V	$I_R=100\mu\text{A}$	80		
Forward Voltage	VF1	V	$I_F=1\text{mA}$		0.60	
	VF2		$I_F=10\text{mA}$		0.72	
	VF3		$I_F=100\text{mA}$		0.90	1.2
Reverse Leakage Current	IR1	μA	$V_R=30\text{V}$			0.1
	IR2		$V_R=80\text{V}$			0.5
Total Capacitance	CT	pF	$V_R=0\text{V}, f=1.0\text{MHz}$		0.9	3.0
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$		1.6	4.0

■ Characteristics(Typical)



**■ Plastic surface mounted package****■ Soldering Footprint****■ Packing Information**

Device	Package	Shipping
1SS184	SOT-23	3000/Tape&Reel