

Small Signal Switching Diodes

VOLTAGE RANGE: 100V

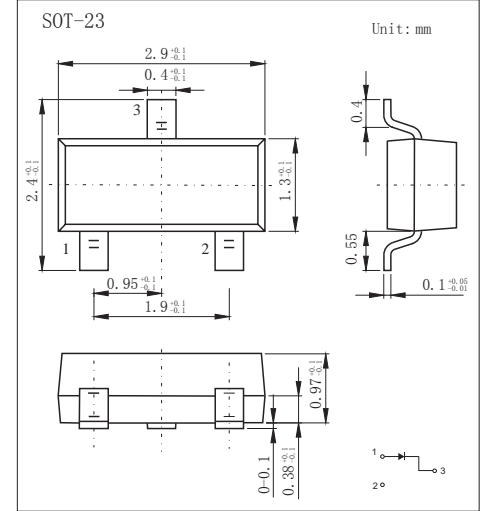
PEAK PULSE POWER: 350mW

FEATURES

- High-Speed Switching Diode

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectified Output Current	I_O	300	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

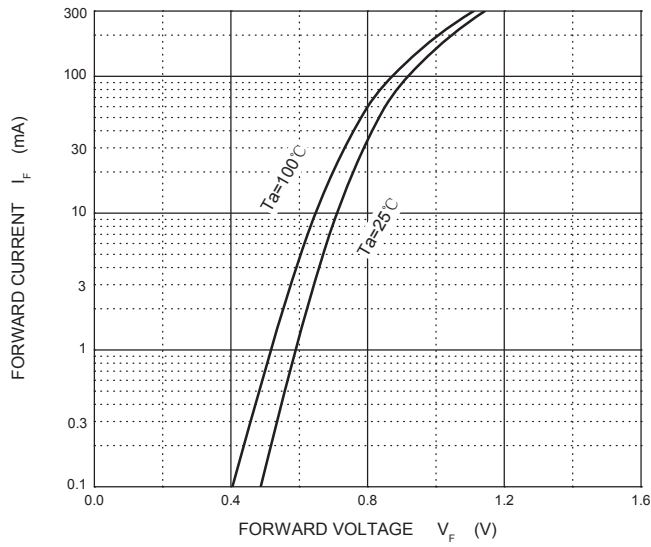
Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	100			V	$I_R=100\mu\text{A}$
Forward Voltage	V_{F1}			715	mV	$I_F=1\text{mA}$
	V_{F2}			855	mV	$I_F=10\text{mA}$
	V_{F3}			1000	mV	$I_F=50\text{mA}$
	V_{F4}			1250	mV	$I_F=150\text{mA}$
Reverse Current	I_{R1}			1	μA	$V_R=75\text{V}$
	I_{R2}			25	nA	$V_R=20\text{V}$
Diode Capacitance	C_D			2	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R$

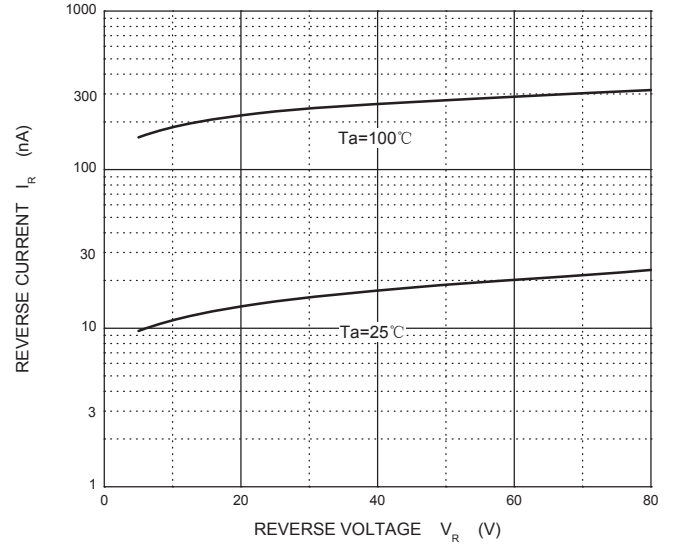
MARKING: 5D

RATINGS AND CHARACTERISTIC CURVES

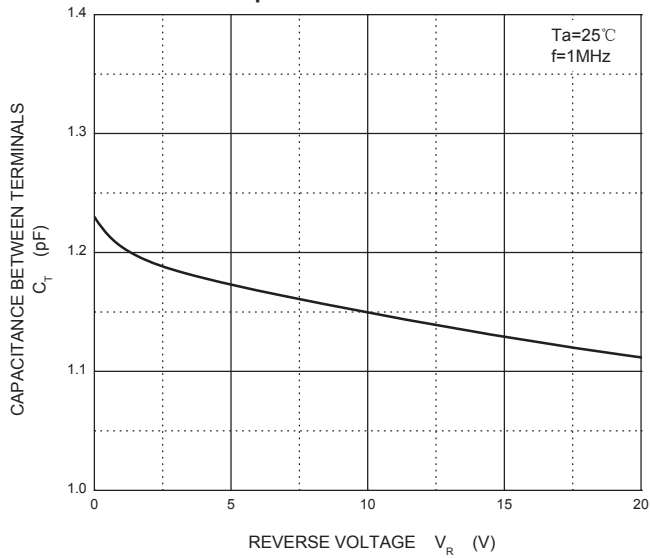
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

