



1. Description

FAST SWITCHING DIODES

2. Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

3. Application

- High frequency rectifier
- Signal switching

body

5. Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_{FM}	500	mA
Forward Continuous Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current @ $t=1s$	I_{FSM}	2.0	A
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	$T_J \quad T_{stg}$	-55~+150	$^{\circ}\text{C}$

6. Pinning information

Pin	Symbol	Description	Simplified outline	Equivalent Circuit	Marking	Package
1	-	Cathode			T5	SOD-123
2	+	Anode				

7. Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F=5\text{mA}$	0.62	—	0.72	V
	V_{F2}	$I_F=10\text{mA}$	—	—	0.855	V
	V_{F3}	$I_F=100\text{mA}$	—	—	1.0	V
	V_{F4}	$I_F=150\text{mA}$	—	—	1.25	V
Reverse current	I_{R1}	$V_R=75\text{V}$	—	—	2.5	μA
	I_{R2}	$V_R=20\text{V}$	—	—	25	nA
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$	75	—	—	V
Capacitance between terminals	C_T	$V_R=0\text{V}$, $f=1.0\text{MHz}$	—	—	4	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	—	—	4	ns

8. Typical Characteristics

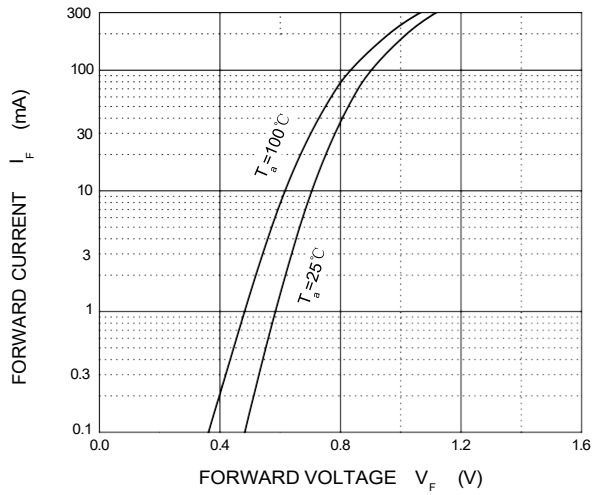


Figure 1. Forward Characteristics

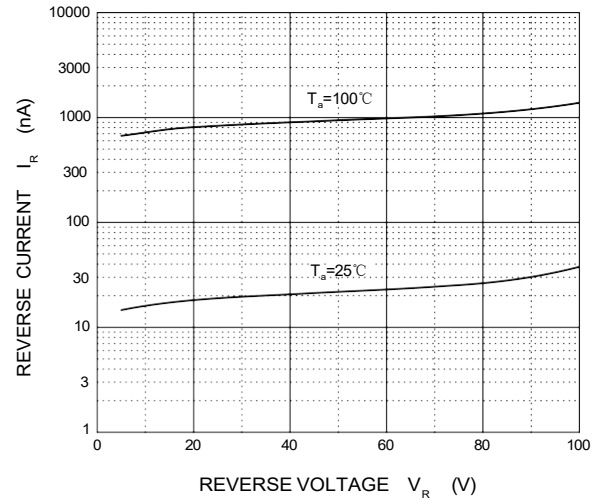


Figure 2. Reverse Characteristics

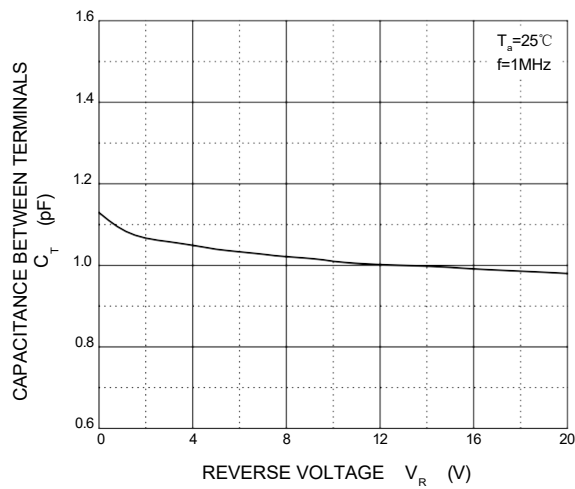


Figure 3. Capacitance Characteristics

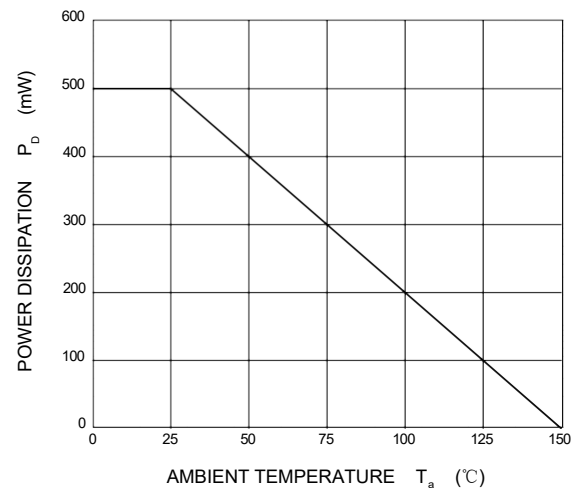


Figure 4. Power Derating Curve

The curve above is for reference only.