

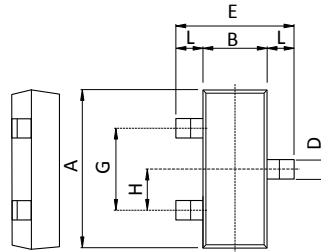
Single Switching Diode



SOT-23

Features

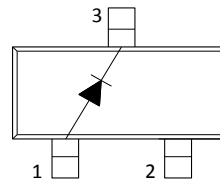
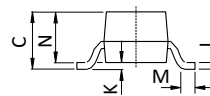
- Chip made in Japan
- Ultra high speed switching application
- Low Forward Voltage
Fast Reverse Recovery Time
Small Total Capacitance



Dim	Millimeters
A	2.90±0.15
B	1.30±0.15
C	1.05±0.15
D	0.40±0.10
E	2.50+0.10/-0.25
G	1.90±0.10
H	0.95
J	0.12+0.00/-0.1
K	0.00~0.10
L	0.55
M	0.40±0.10
N	1.0±0.10

Mechanical Data

- Case: SOT-23 Plastic Package
- Weight: Approx. 0.008g
- Packaging:
 - 3K per 7" reel (8mm tape)
 - 15K inner box, 150K out box
- Marking: F3



Maximum Ratings & Thermal Characteristics

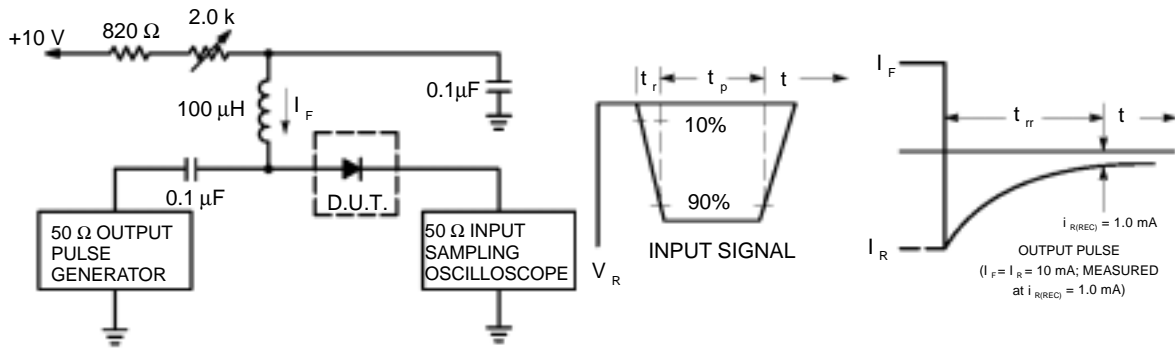
T_{amb}=25°C, unless otherwise specified

Characteristic	Symbol	Max Ratings	Unit
Maximum Peak Reverse Voltage	V _{RM}	85	V
Reverse Voltage	V _R	80	V
Continuous Forward Current	I _F	300	mA
Surge Current (1µs)	I _{FSM}	2	A
Power Dissipation (Mounted On 99.5% Alumina, 10*8*0.6mm)	P _D	300	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C

Electrical Characteristics

T_{amb}=25°C, unless otherwise specified

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _{F(1)}	I _F =1mA	-	0.60	-	V
	V _{F(2)}	I _F =10mA	-	0.72	-	
	V _{F(3)}	I _F =150mA	-	-	1.25	
Reverse Current	I _R	V _R =80V	-	-	10	µA
Total Capacitance	C _T	V _R =0, f=1MHz	-	0.9	3.0	pF
Reverse Recovery Time	t _{rr}	I _F =10mA	-	1.6	4.0	nS



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH DIODE

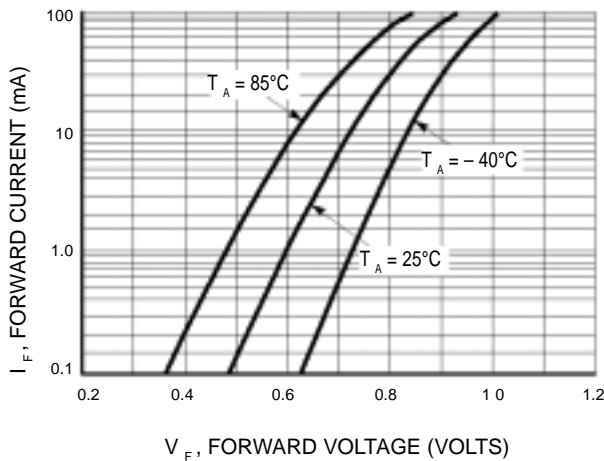


Figure 2. Forward Voltage

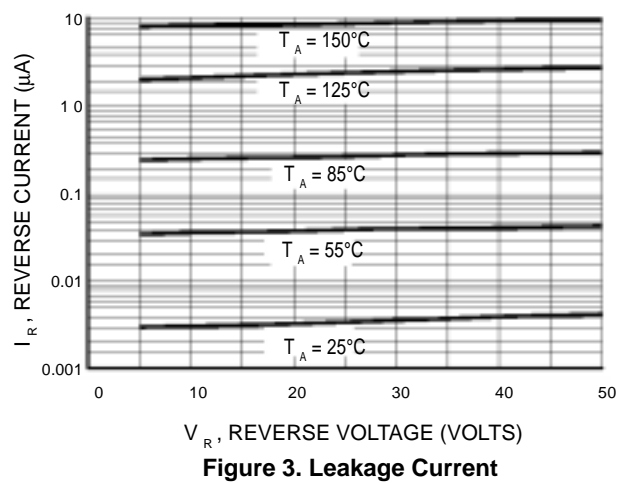


Figure 3. Leakage Current

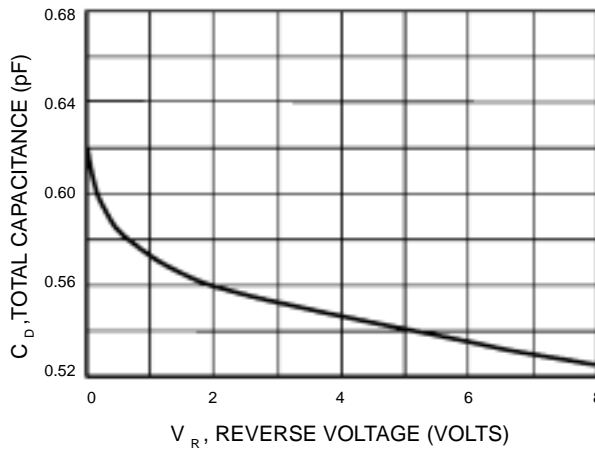


Figure 4. Capacitance