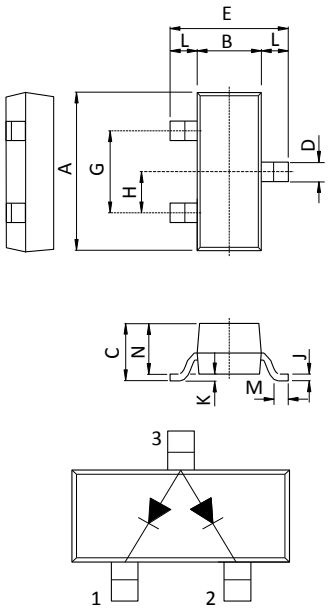
Dual Swtiching Diode

SOT-23

Features

- Ultra high speed switching application
- Low Forward Voltage
  Fast Reverse Rocovery 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+0.0/-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)
- Marking: A1

Maximum Ratings & Thermal Characteristics

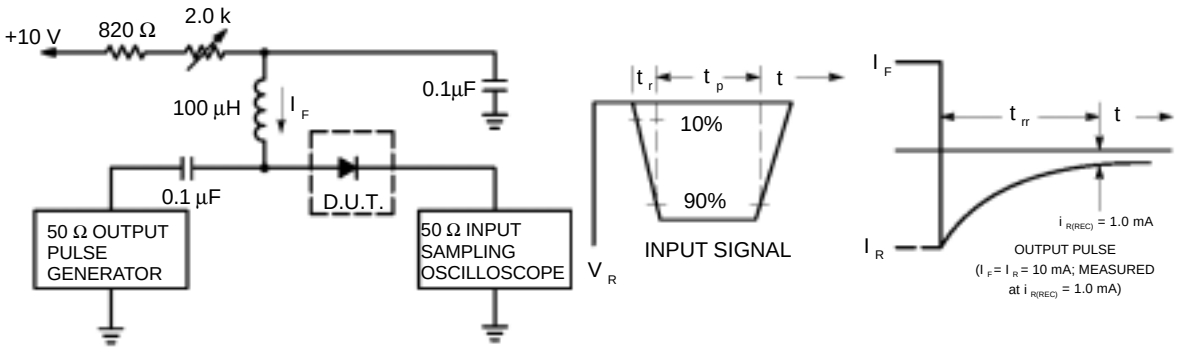
Tamb=25℃, unless otherwise specified

Characteristic	Symbol	Max Ratings	Unit
Maximum Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Continuous Forward Current	I_F	250	mA
Surge Current (1uS)	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 Tempearture Range	T_{stg}	-55~150	°C

Electrical Characteristics

Tamb=25℃, 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	uA
Total Capcitance	C_T	V_R=0, f=1MH$_Z$	-	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 $I_{R(peak)}$ is equal to 10mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH DIODE

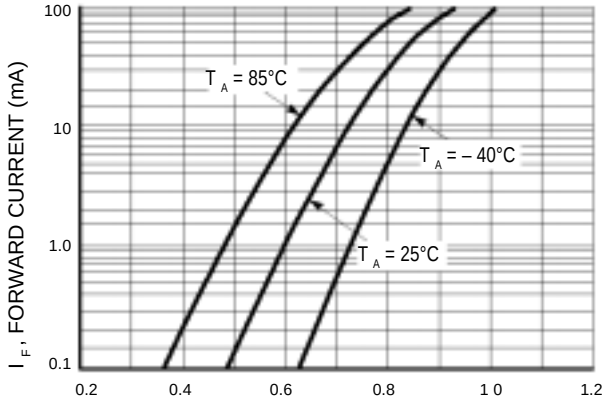


Figure 2. Forward Voltage

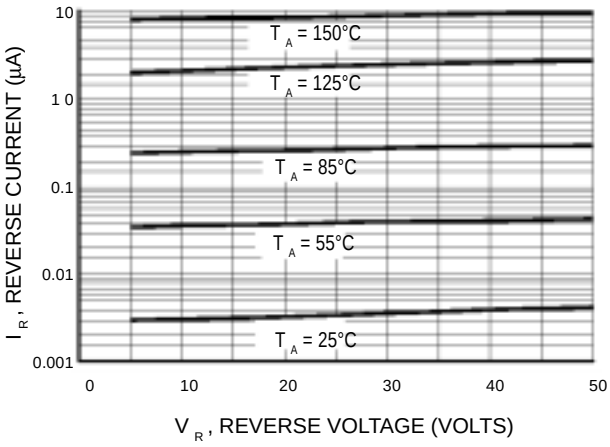


Figure 3. Leakage Current

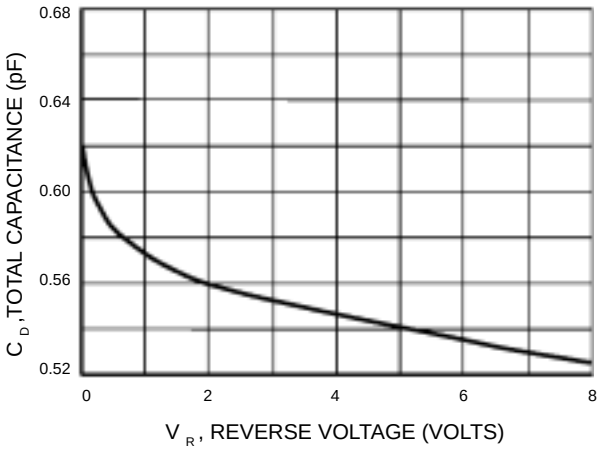


Figure 4. Capacitance