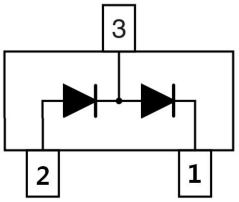
Dual Series Switching Diode

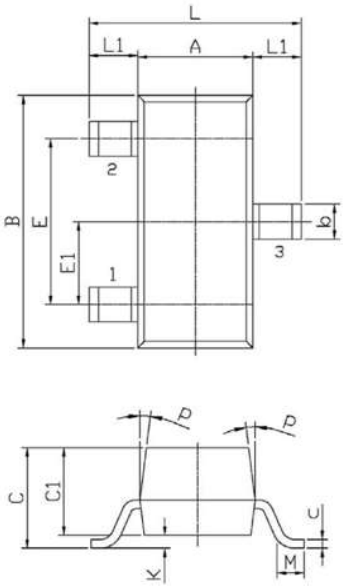
Features
- High Conductance: I_F =200mA
- Fast Switching Speed : trr < 4ns Maximum
- Small Plastic SOT-23 Package
- Series-Pair Configuration

Mechanical Data
- Case: Molded plastic package
- Terminal: Lead solderable per MIL-STD-202, Method 208
- Polarity : See diagram
- Weight : 0.008grams

Connection Diagram



SOT-23



DIM	Unit: mm	
	MIN	MAX
A	1.15	1.50
B	2.70	3.10
b	0.35	0.55
C	-	1.30
C1	0.90	1.20
c	0.05	0.20
E	1.70	2.10
E1	0.85	1.05
K	0	0.10
L	2.20	2.70
L1	0.45	0.65
M	0.20	-
P	7°	

Maximum Ratings (Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	V_{RMS}	53	V
Forward Continuous Current (Note 1)	I_{FM}	200	mA
Average Rectifier Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0uS @ t=1.0S	I_{FSM}	2.0 1.0	A
Power Dissipation (Note 1)	P_D	350	mW
Thermal Resistance Junction to Ambient Air	Rth(j-a)	357	K/W
Operating Junction and Storage Temperature Range	T_J & T_{STG}	-65 to +150	℃

Electrical Charateristics (Ta=25℃ unless otherwise noted)

Characteristic		Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	IF=1.0mA	V_F	-	-	0.715	V	
	IF=10mA		-	-	0.855	V	
	IF=50mA		-	-	1.0	V	
	IF=150mA		-	-	1.25	V	
Peak Leakage Current	VR=75V	I_R	-	-	2.5	uA	V_R=75V, T_J=25℃
	VR=75V		-	-	50	uA	V_R=75V, T_J=150℃
	VR=25V		-	-	30	uA	V_R=25V, T_J=150℃
	VR=20V		-	-	25	nA	V_R=20V, T_J=25℃
Junction Capacitance		Cj	-	-	2.0	pF	V_R=0V, f=1.0MHz
Reverse Recovery Time (Note 2)		trr	-	-	4.0	nS	

Note 1. Valid Provided that Terminals are kept at ambient temperature

Note 2. Reverse Recovery Test Conditions : IF=IR=10mA, Irr = 0.1×IR, RL =100Ω

Ratings and Characteristics Curves (Ta=25℃ unless otherwise noted)

Fig.1 Typical Instantaneous Forward Characteristics

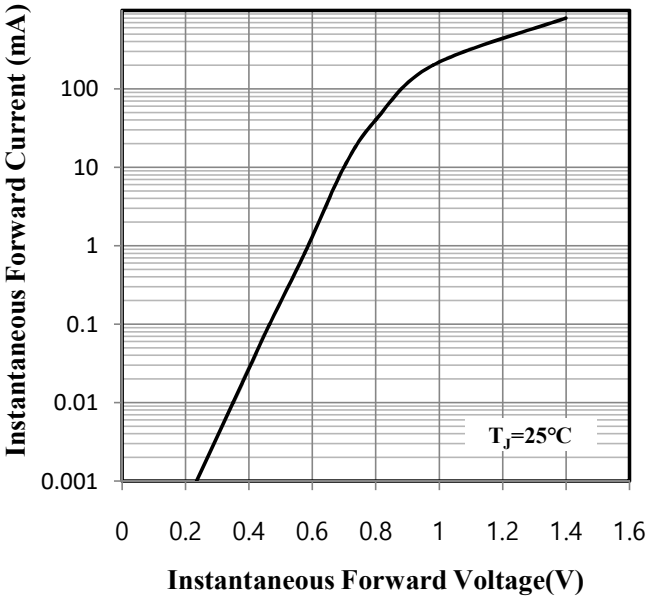


Fig.2 Typical Reverse Charateristics

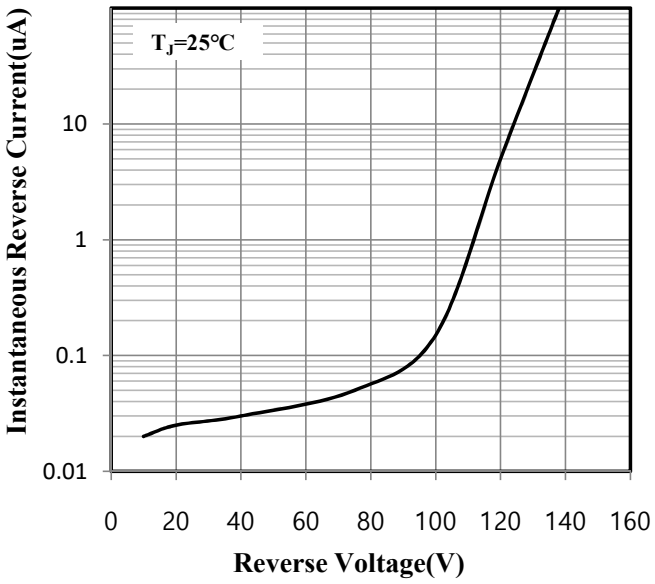


Fig.3 Total Capacitance