

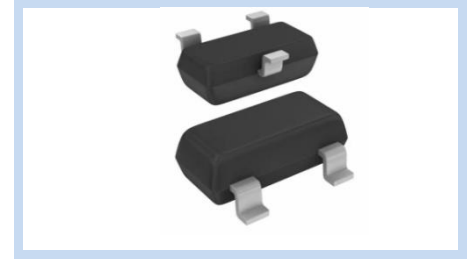
Fast Switch Diodes SOT-23 Package

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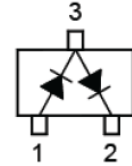
FEATURE

- Power Dissipation: 225mW
- Diode Reverse Voltage:75
- Fast Switching Speed
- High Conductance



MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Continuous Forward Current	Single Diode Load	215	mA
	Double Diode Load	125	
Non- repetitive Peak Forward Surge Current	$t=1s$	0.5	A
	$t=1ms$	1.0	
	$t=1\mu s$	2.0	
Power Dissipation	P_{TOT}	225	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	556	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

Parameter	Symbol	Min	Max	Unit
Reverse Breakdown Voltage	V_R	75	-	V
Forward Voltage	$I_F=1mA$	-	715	mV
	$I_F=10mA$	-	855	
	$I_F=50mA$	-	1000	
	$I_F=150mA$	-	1250	
Reverse current	$V_R=20V, T_J=25^{\circ}C$	-	0.03	μA
	$V_R=70V, T_J=25^{\circ}C$	-	2.5	
	$V_R=25V, T_J=150^{\circ}C$	-	30	
	$V_R=75V, T_J=150^{\circ}C$	-	50	
Typical Junction Measured at Capacitance	C_J	-	1.5	pF
Reverse Recovery Time	t_{rr}	-	6	nS

Note: Maximum Rating at $T_A = 25^{\circ}C$.

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RATINGS AND CHARACTERISTICS CURVES

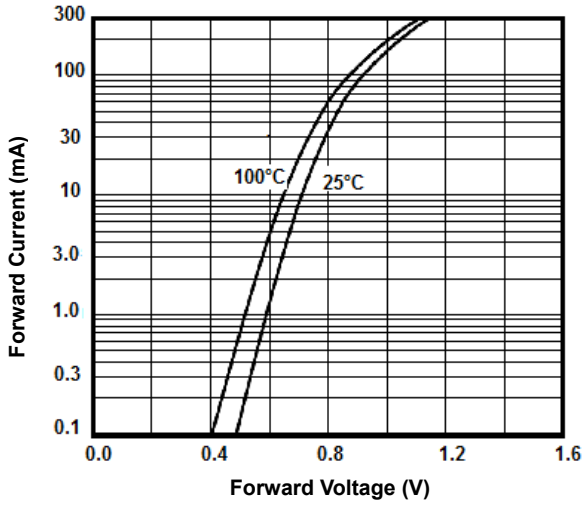


Fig1. Forward Characteristics

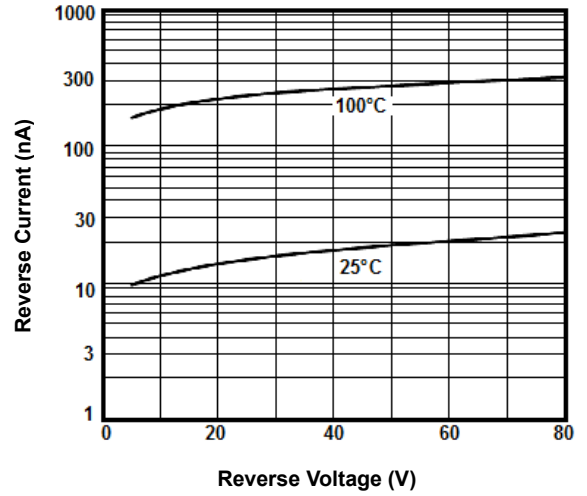


Fig2. Reverse Characteristics

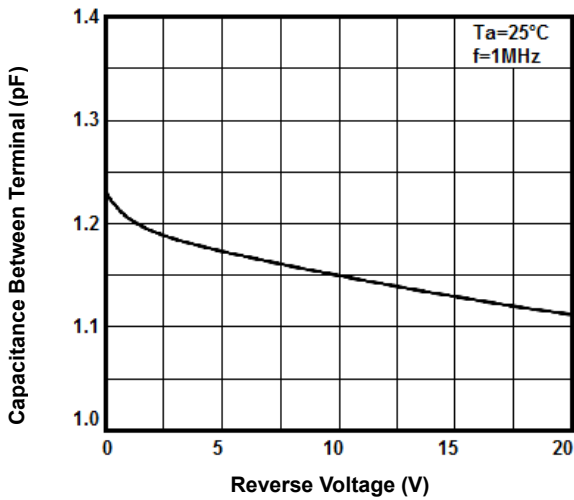


Fig3. Capacitance Characteristics

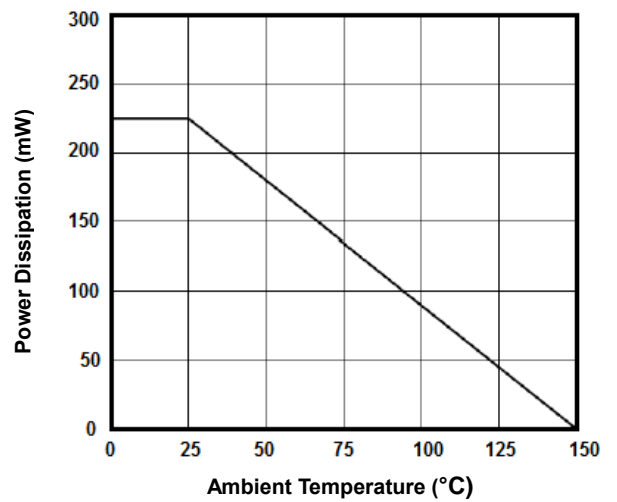


Fig4. Power Derating Curve

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DIMENSIONS

SOT-23	Min (mm)	Max (mm)
A1	-	0.10
A2	0.89	1.40
b	0.30	0.50
c	0.08	0.20
D	2.70	3.10
E	2.10	2.80
E1	1.20	1.60
e1	1.78	2.04
L	0.15	-
X	0.80	-
Y	1.00	-
X1	0.95	
Y1	1.10	
X2	1.10	
Y2	2.40	
X3	2.70	

