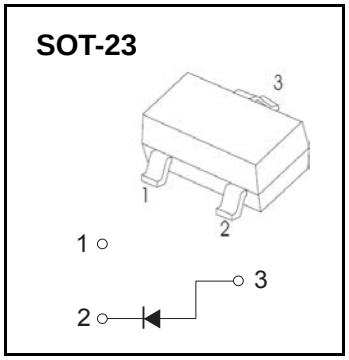
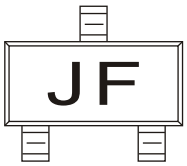
SOT-23 Plastic-Encapsulate Diodes

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



Marking: JF



Maximum Ratings @Ta=25℃

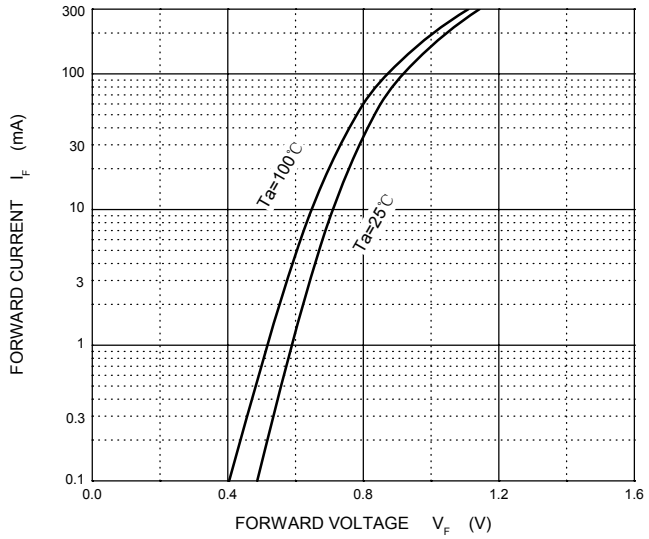
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	70	V
DC Blocking Voltage	V_R	70	V
Average Rectified Output Current	I_O	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	556	℃/W
Operation Junction and Storage Temperature Range	T_J ,T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

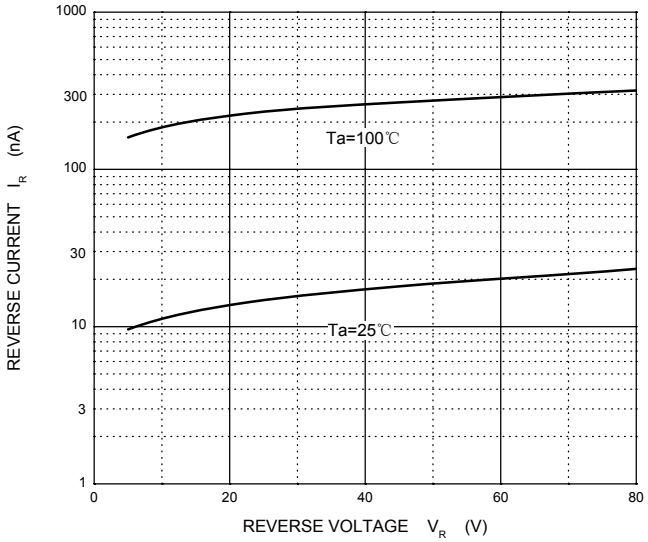
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	70		V
Reverse voltage leakage current	I_R	VR=70V		2.5	μA
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA		0.715 0.855 1 1.25	V
Diode capacitance	C_D	V_R=0, f=1MHz		1.5	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,R_L=100Ω, I_{rr}=0.1×I_R		6	nS

Typical Characteristics

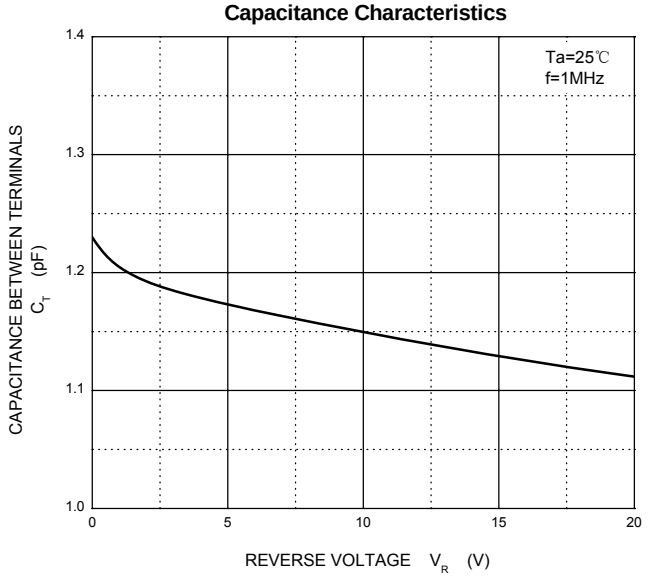
Forward Characteristics



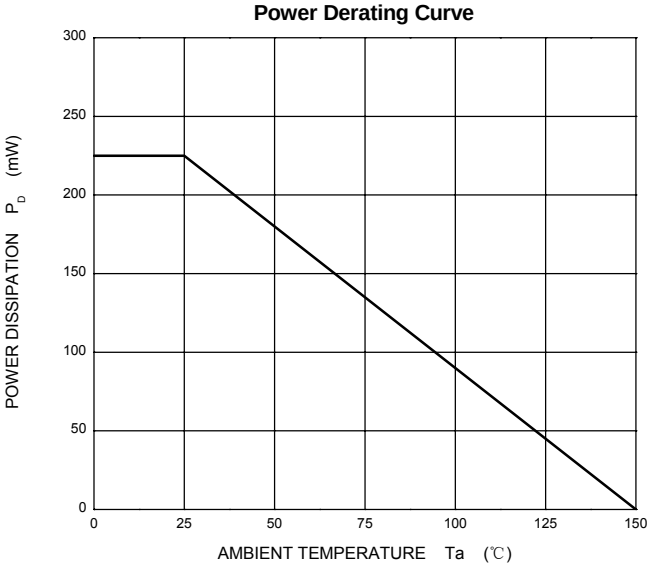
Reverse Characteristics

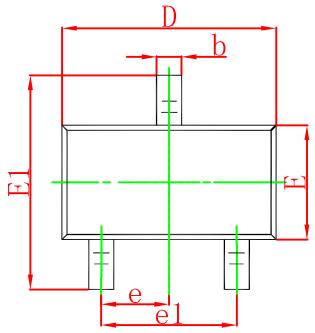


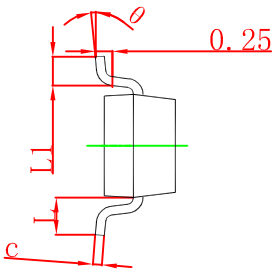
Capacitance Characteristics

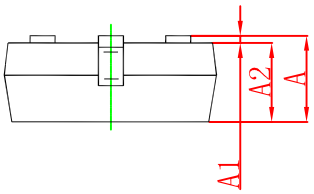


Power Derating Curve



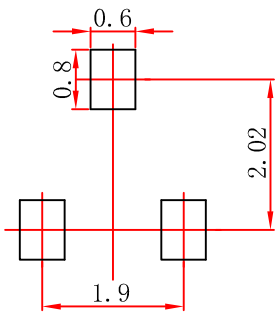






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.