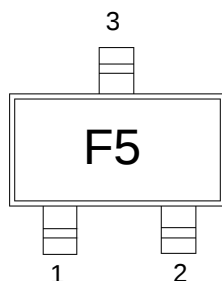


Features

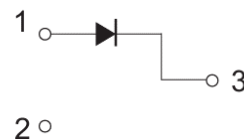
- High voltage, high speed switching applications
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking and pin assignment



SOT-323 top view



Schematic diagram



Halogen-Free

Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	250	V
V_R	DC Blocking Voltage	200	V
I_{FM}	Forward Continuous Current	300	mA
I_O	Average Rectified Output Current	100	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
T_J, T_{STG}	Operating and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

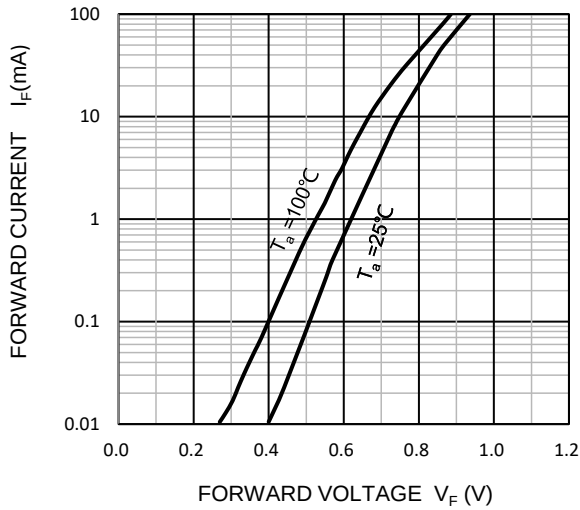
Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse current	$V_R=50\text{V}$	--	--	0.1	μA
		$V_R=200\text{V}$	--	--	1.0	μA
V_F	Forward voltage	$I_F=10\text{mA}$	--	--	1.0	V
		$I_F=100\text{mA}$	--	--	1.2	V
C_T	Capacitance between terminals	$V_R=0, f=1\text{MHz}$	--	--	3.0	pF
t_{rr}	Reverse recovery time	$V_R=6\text{V}, I_F=10\text{mA}, I_{rr}=0.1\text{XIR}$	--	60	--	ns

Ordering Information (Example)

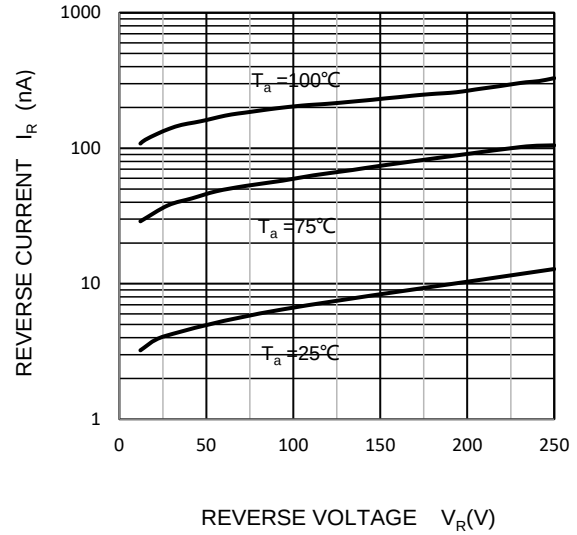
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
1SS370	SOT-323	F5	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

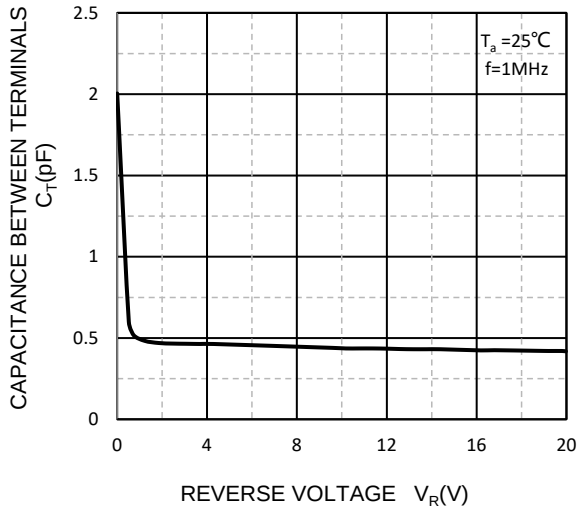
Forward Characteristics



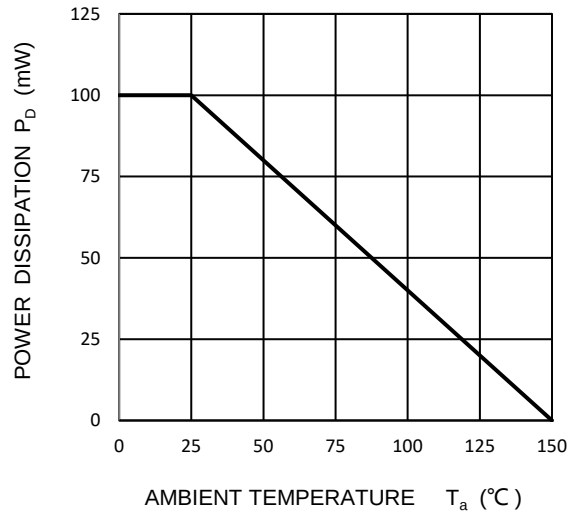
Reverse Characteristics



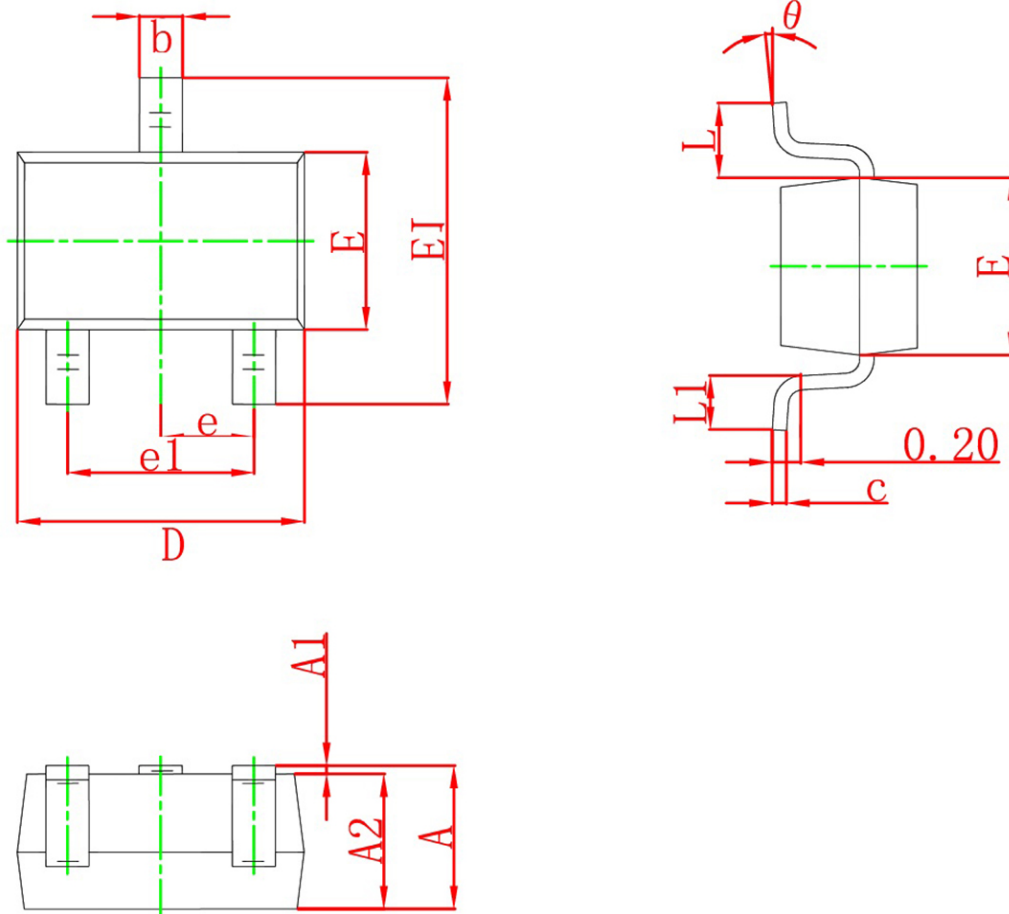
Capacitance Characteristics



Power Derating Curve



SOT-323 Package Outline Dimensions



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°