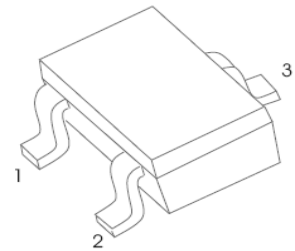




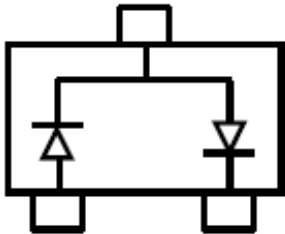
Features

- Fast Switching
- Small Surface Mount Package

SOT-523



Marking: JE



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

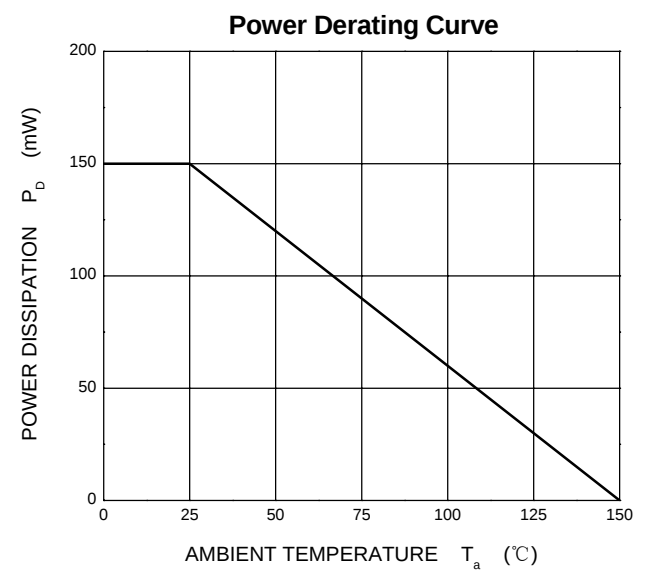
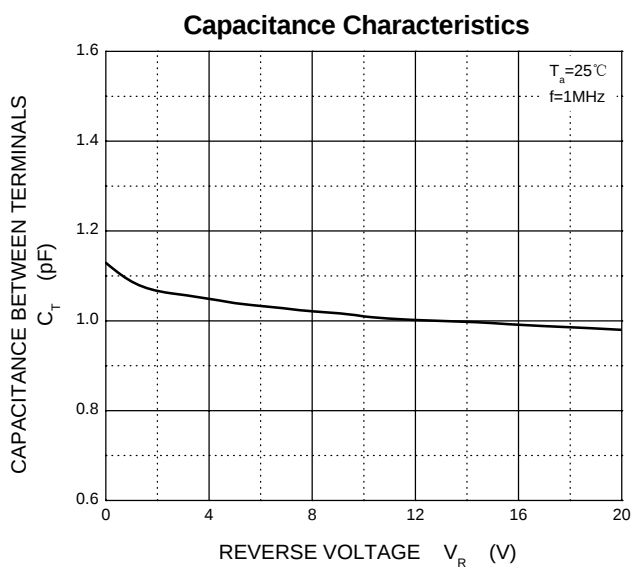
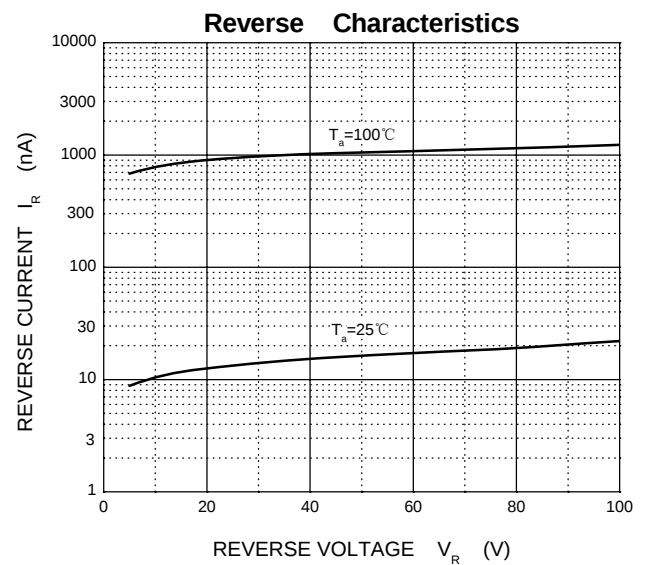
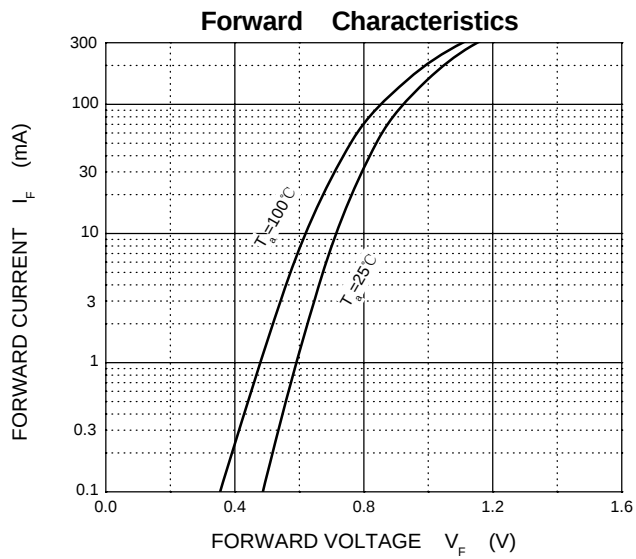
Parameter	Symbo	Limit	Unit
Reverse voltage	V_R	85	V
Forward current	I_O	75	mA
Forward power dissipation	P_D	150	mW
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

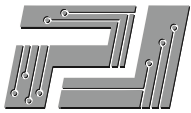
Electrical Characteristics ($T_a = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1\mu\text{A}$	85		V
Reverse voltage leakage current	I_{R1}	$V_R = 75\text{V}$		2	μA
	I_{R2}	$V_R = 25\text{V}$		0.03	μA
Forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$		715 855 1000 1250	mV
Diode capacitance	C_D	$V_R = 0$ $f = 1\text{MHz}$		1.5	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}$ $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$		4	ns



Electrical Characteristics Curves

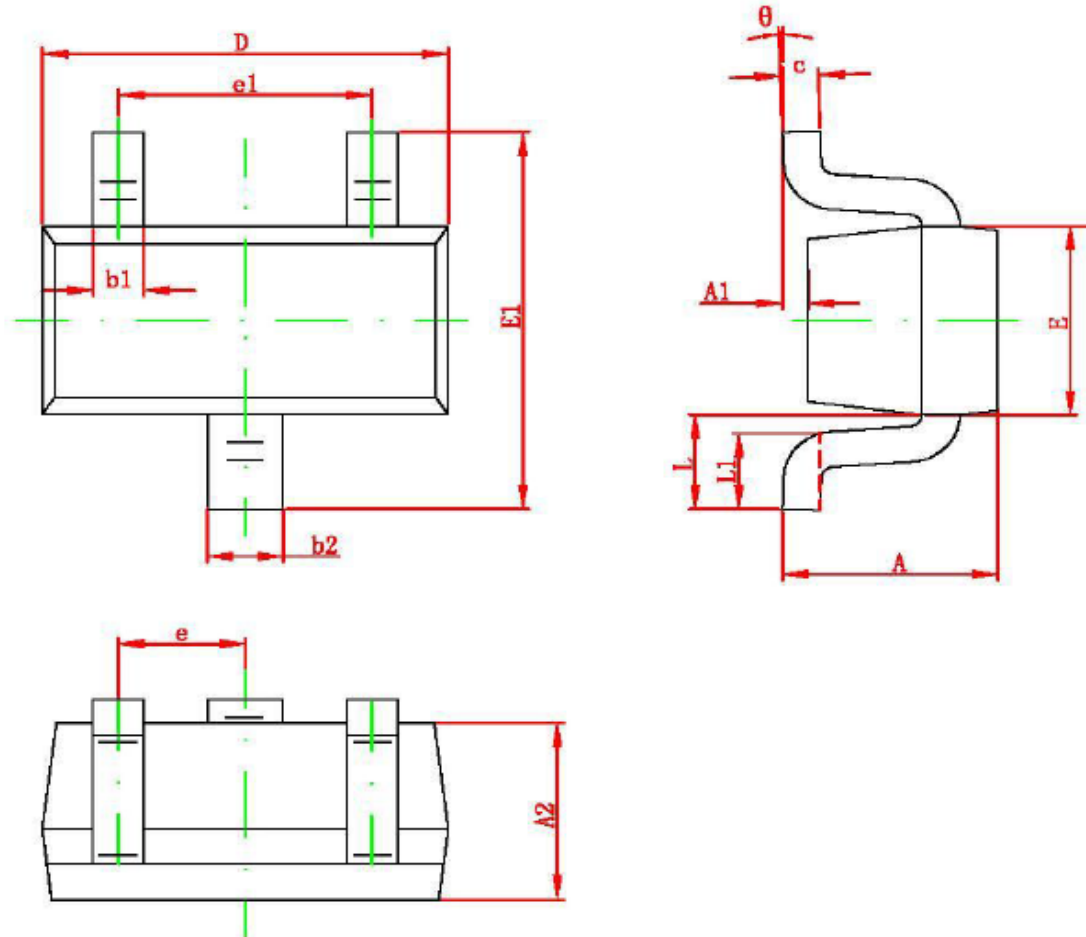




Package Outline

SOT-523

unit: mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°