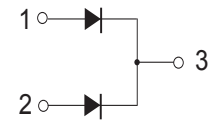
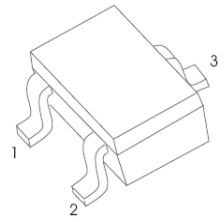
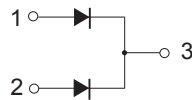
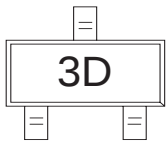


SOT-523 Plastic-Encapsulate Diodes**RB715W****Switching Diodes****SOT-523****FEATURES**

- High Reliability, Low V_F
- Extra Small Power Mold Type

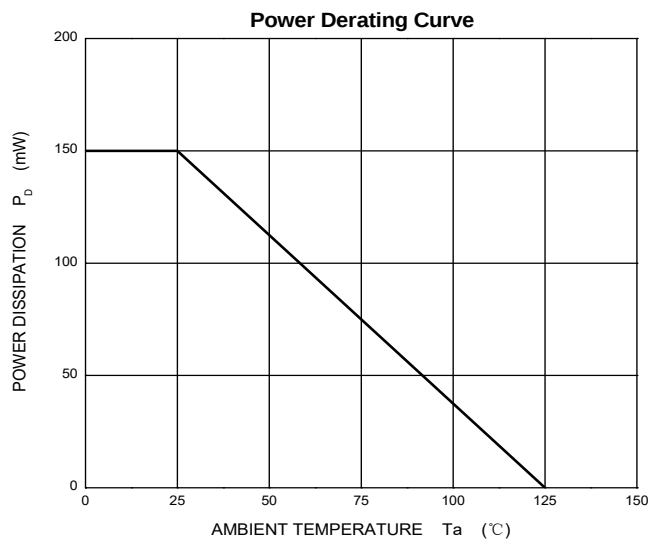
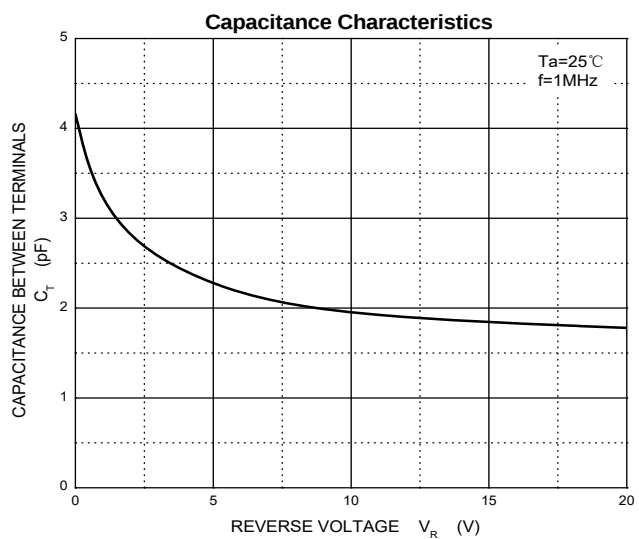
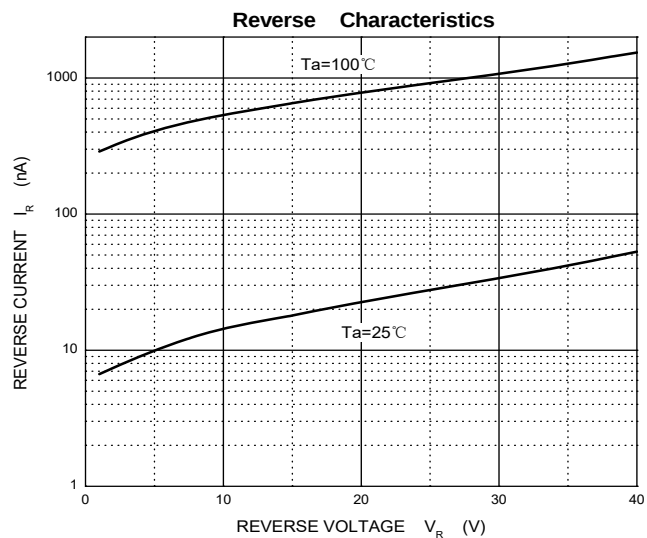
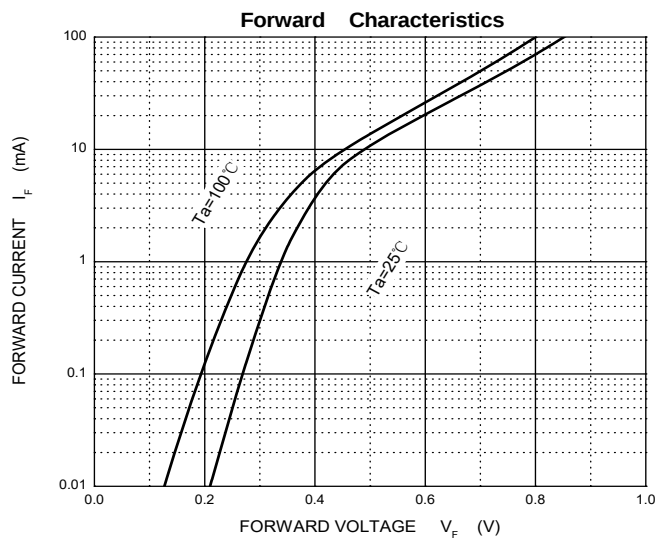
MARKING**Equivalent Circuit****MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse voltage	V_R	40	V
Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	I_{FSM}	200	mA
Average forward current	I_O	30	mA
Power dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_j, T_{stg}	-55~+150	$^{\circ}\text{C}$

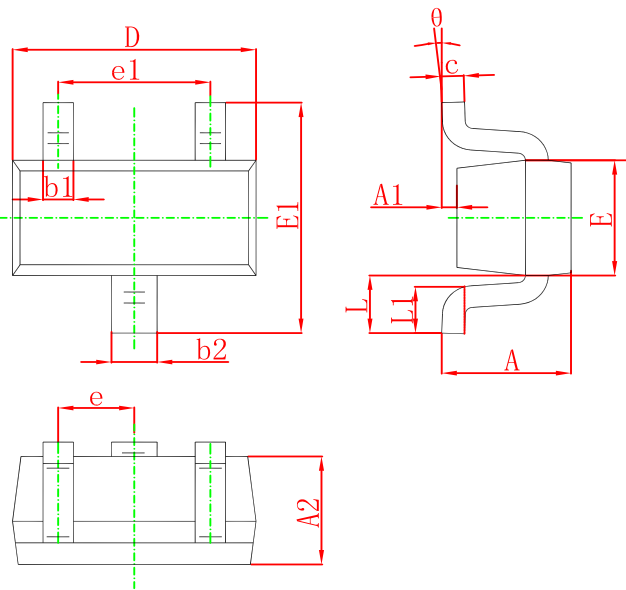
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage leakage current	I_R	$V_R=10\text{V}$			1	μA
Forward voltage	V_F	$I_F=1\text{mA}$			0.37	V
Capacitance between terminals	C_T	$V_R=1\text{V}, f=1\text{MHz}$		2.0		pF

Typical Characteristics

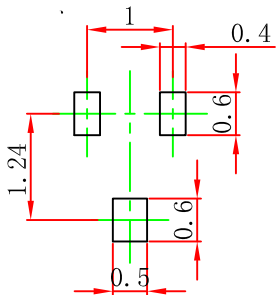


Package Outline Dimensions (SOT-523)



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°

Suggested Pad Layout (SOT-523)



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.