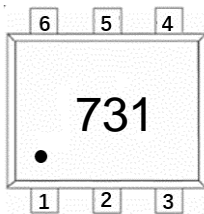


Features

- Small Power Mold Type
- Low V_F
- High Reliability

Applications

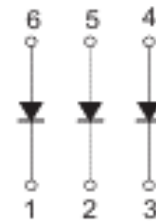
- General Rectification



Marking and pin assignment



SOT-363 top view



Schematic diagram



Pb-Free



RoHS



Halogen-Free

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

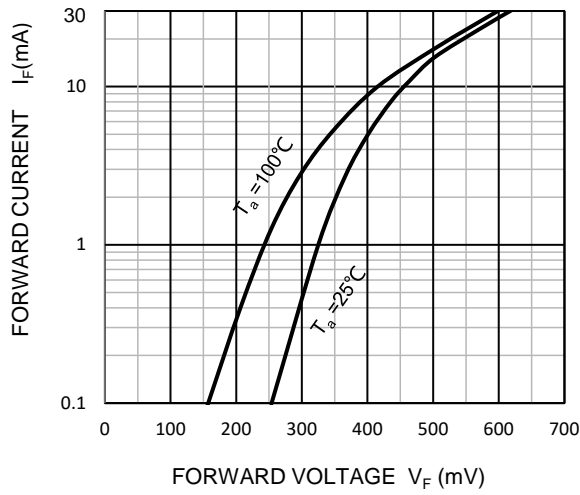
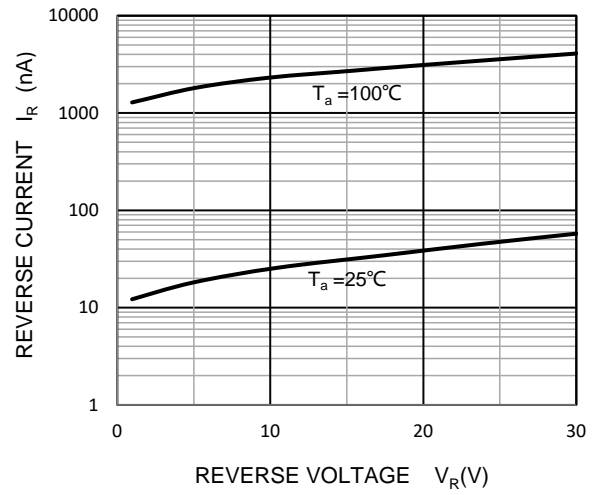
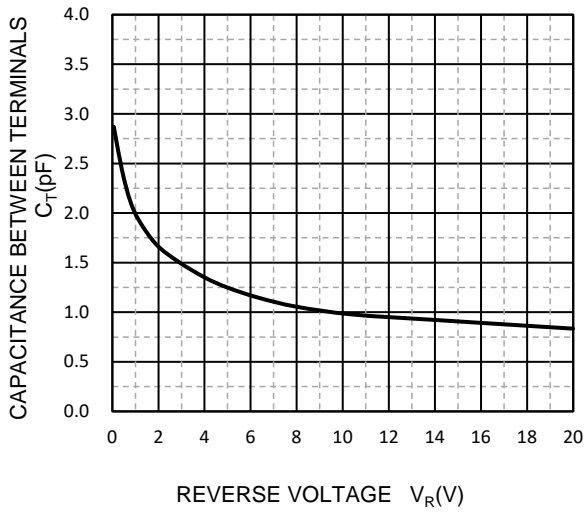
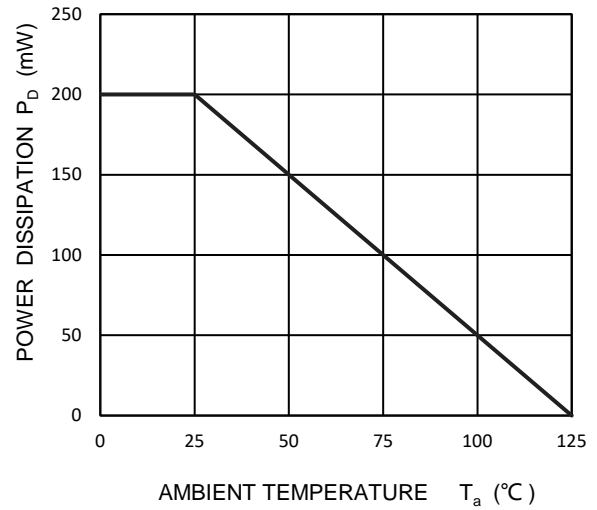
Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	40	V
I_o	Average Rectified Forward Current	30	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	200	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	$^\circ\text{C}/\text{W}$
T_J	Operating Junction Temperature Range	-40~ +125	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55~ +150	$^\circ\text{C}$

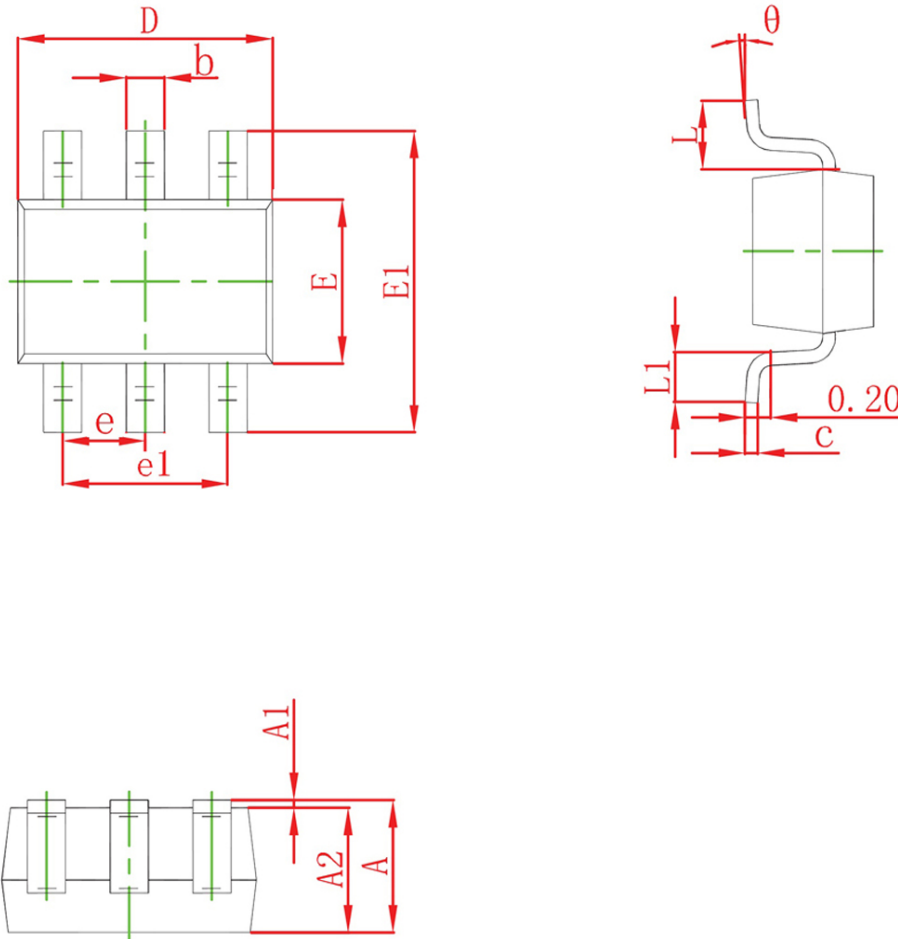
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100\mu\text{A}$	40	--	--	V
I_R	Reverse current	$V_R=10\text{V}$	--	--	1	μA
V_F	Forward voltage	$I_F=1\text{mA}$	--	--	0.37	V
C_{tot}	Total capacitance	$V_R=1\text{V}, f=1\text{MHz}$	--	--	2	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB731XN	SOT-363	731	3,000	45,000	180,000	7" reel

Typical Operating Characteristics
Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve


SOT-363 Package information


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	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
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°