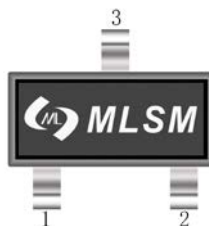


Features

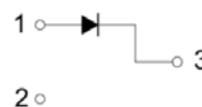
- Small Surface Mounting Type
- Low V_F
- High Reliability

Applications

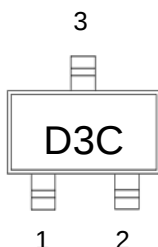
- Low Power Rectification



SOT-23 top view



Schematic diagram



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	Continuous Forward Current	100	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	1	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	400	$^\circ\text{C}/\text{W}$
T_J	Operating Junction Temperature Range	$-40 \sim +125$	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	$-55 \sim +150$	$^\circ\text{C}$

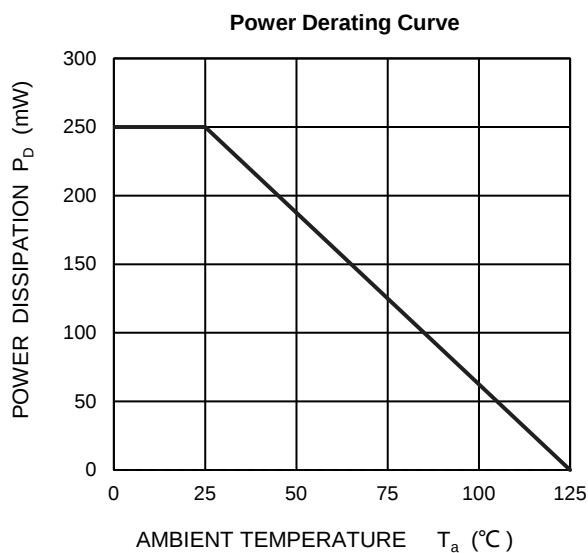
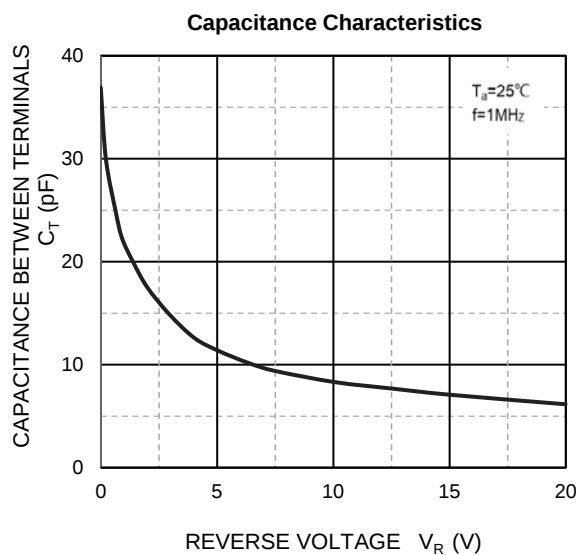
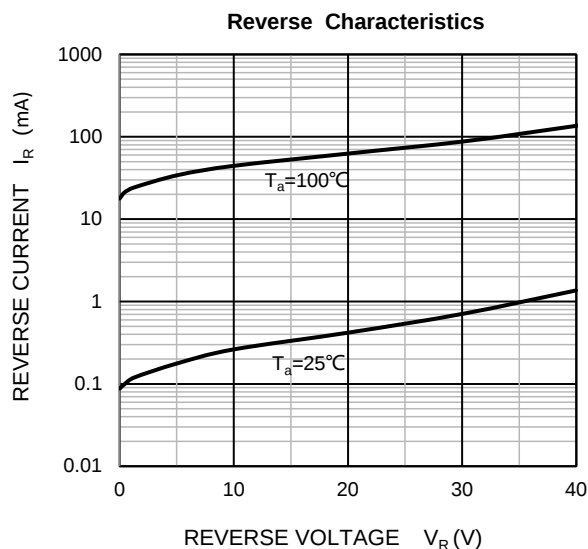
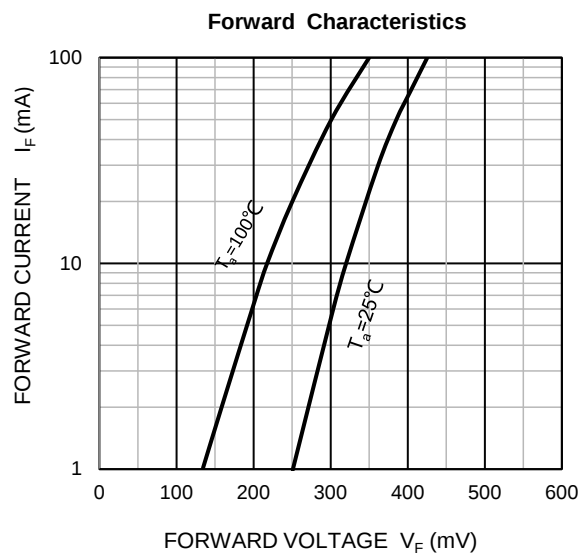
ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100\mu\text{A}$	40	--	--	V
I_R	Reverse current	$V_R=10\text{V}$	--	--	30	μA
V_F	Forward voltage	$I_F=100\text{mA}$	--	--	0.55	V
		$I_F=10\text{mA}$	--	--	0.34	V
C_{tot}	Total capacitance	$V_R=10\text{V}, f=1\text{MHz}$	--	6	--	pF

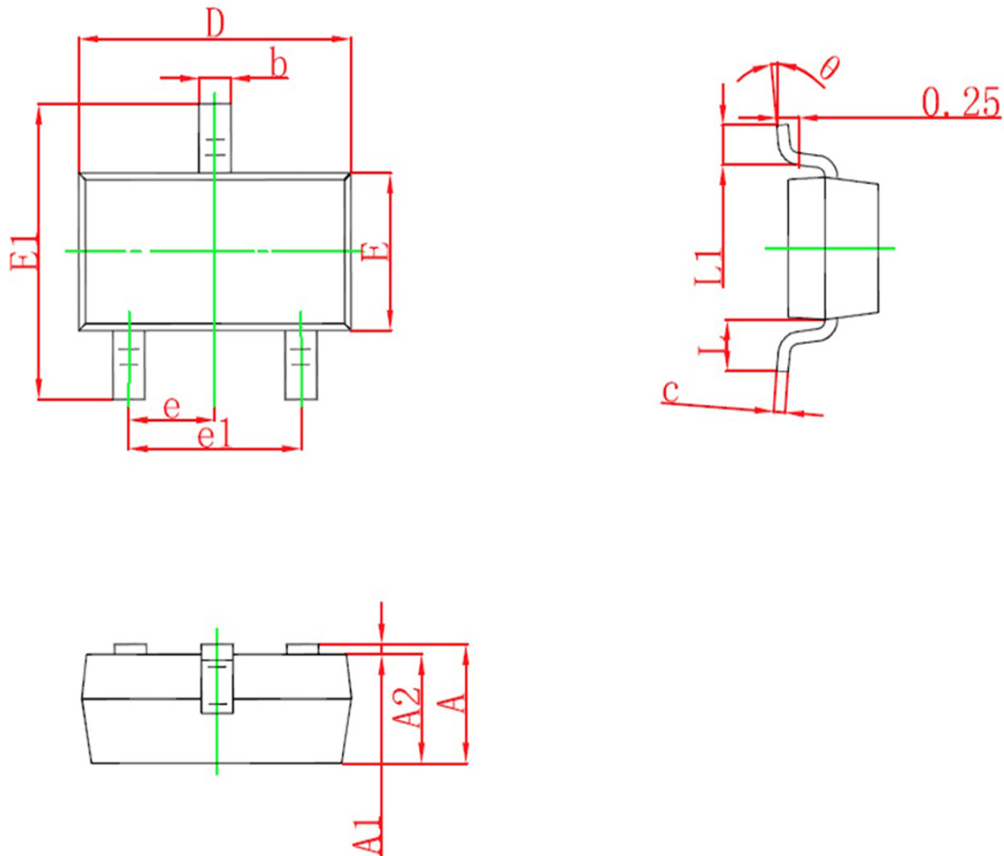
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB421D	SOT-23	D3C	3,000	45,000	180,000	7"reel

Typical Operating Characteristics



SOT-23 Package information



Symbol	Dimensions in Millimeters(mm)		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
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
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°