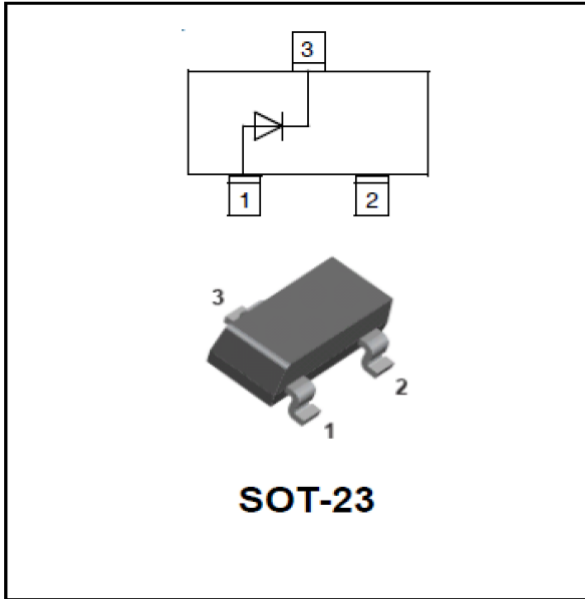


Schottky Barrier Rectifier



Features

- VR 40V
- IF 0.1A
- For Surface Mount Application and High Current Capability
- Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** A2

■ Maximum Rating, ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RRM}	V	40
Reverse Voltage	V_R	V	40
Forward Continuous Current	I_F	mA	100
Non-Repetitive Peak Forward Surge Current @8.3ms, Half sine-wave	I_{FSM}	A	1
Power Dissipation	P_D	mW	200
Thermal Resistance, Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$	500
Storage Temperature	T_{STG}	$^\circ\text{C}$	-55 to +125
Operating Junction Temperature	T_j	$^\circ\text{C}$	-55 to +125

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB420DS	F2	Approximate 0.009	3000	30000	120000	7" reel

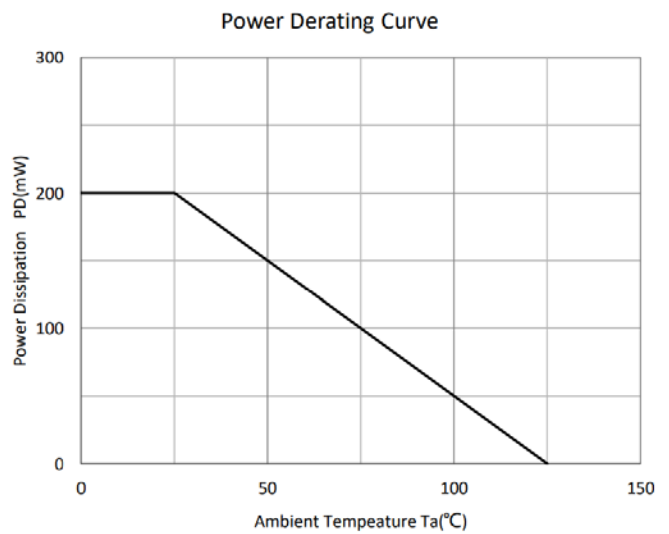
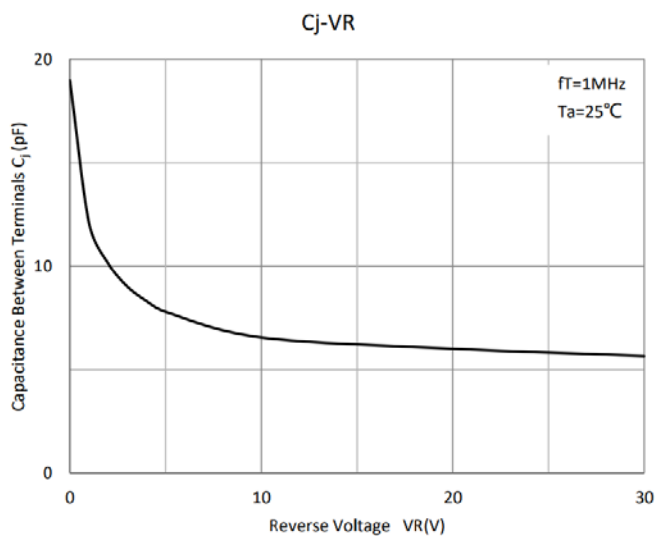
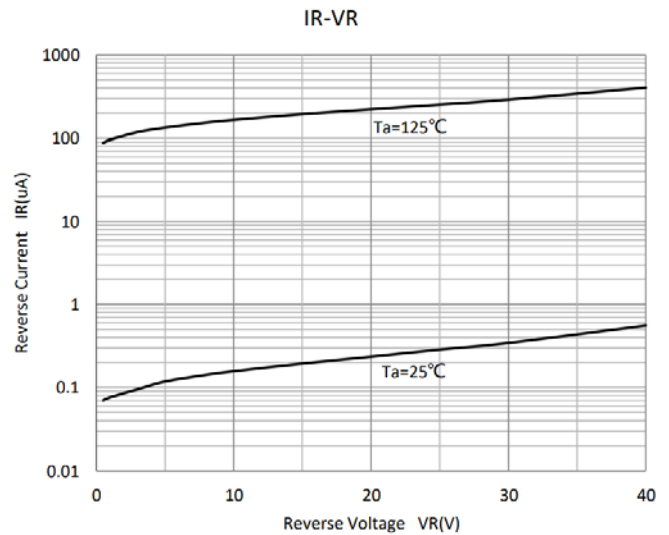
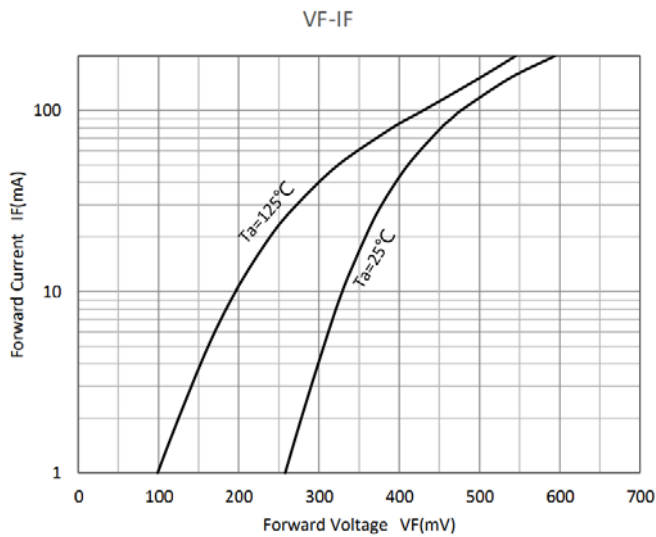


RB420DS

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	MIN	TYP	MAX
Reverse Voltage	V _R	V	I _R =100uA	40		
Forward Voltage	V _F	V	I _F =1mA		0.28	0.35
			I _F =10mA		0.36	0.45
			I _F =100mA			0.6
Reverse Current	I _R	uA	V _R =10V			1
			V _R =40V			5
Diode capacitance	C _j	pF	V _R =0V, f _T =1MHz			25

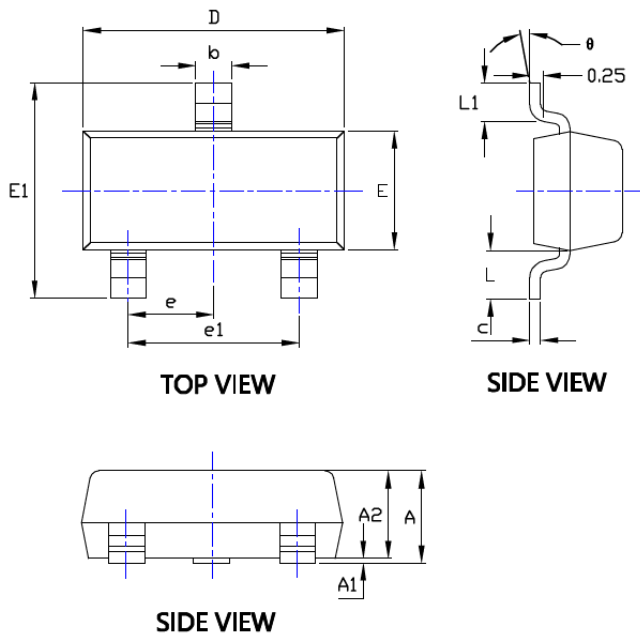
■ Typical Characteristics





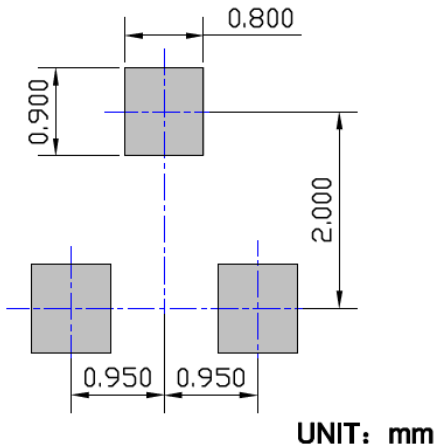
RB420DS

■SOT-23 Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
θ	0°	8°	0°	8°

■SOT-23 Suggested Pad Layout





RB420DS

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