



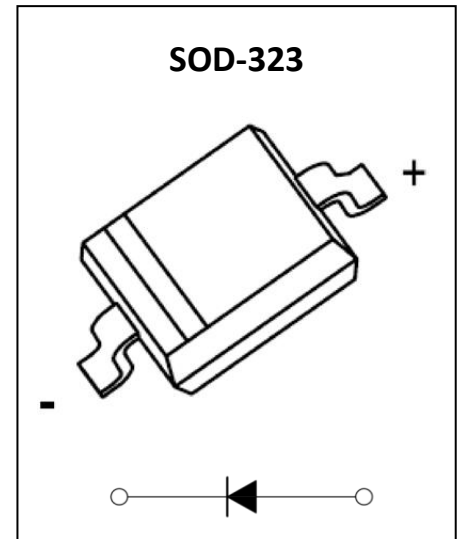
**RB551V-40 Schottky Barrier Diode**

**Feature**

- Small Power Mold Type
- Low VF
- Low IR
- High Reliability

**Application**

- High Frequency Inverters
- Free Wheeling
- Polarity Protection Applications



**MARKING:**



**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

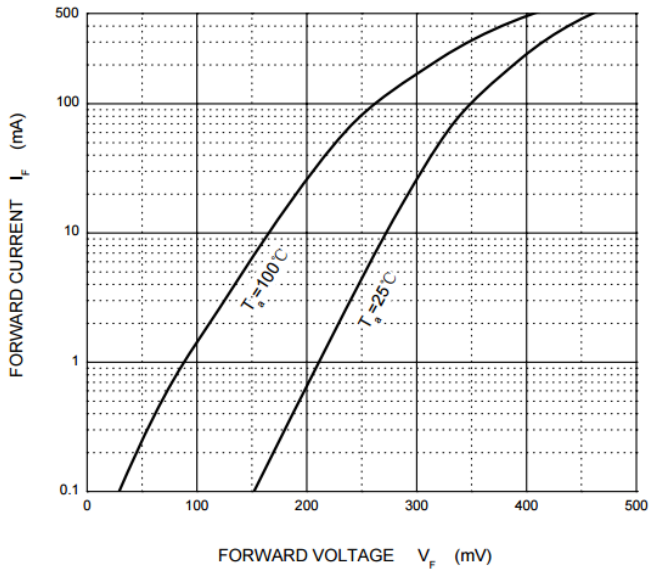
Parameter	Symbol	Value	Unit
DC reverse voltage	V <sub>R</sub>	40	V
Mean rectifying current	I <sub>O</sub>	0.5	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>D</sub>	0.2	W
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise noted)**

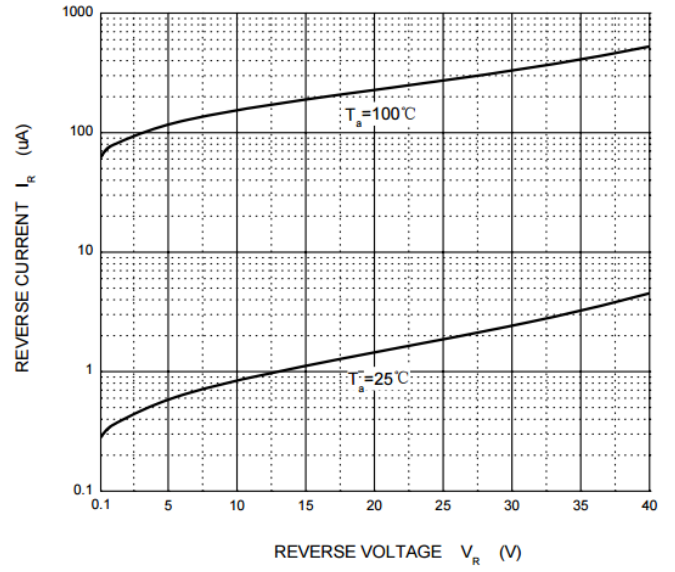
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V <sub>BR</sub>	I <sub>R</sub> = 250μA	40			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1A			0.36	
		I <sub>F</sub> = 0.5A			0.47	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 40V			100	μA
Diode capacitance	C <sub>D</sub>	V <sub>R</sub> =4V, f=1MHz		20		pF

**Typical Characteristics**

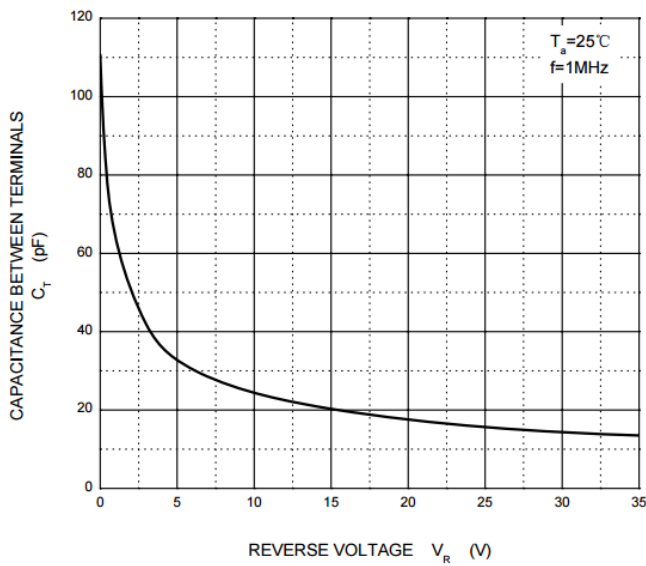
**Forward Characteristics**



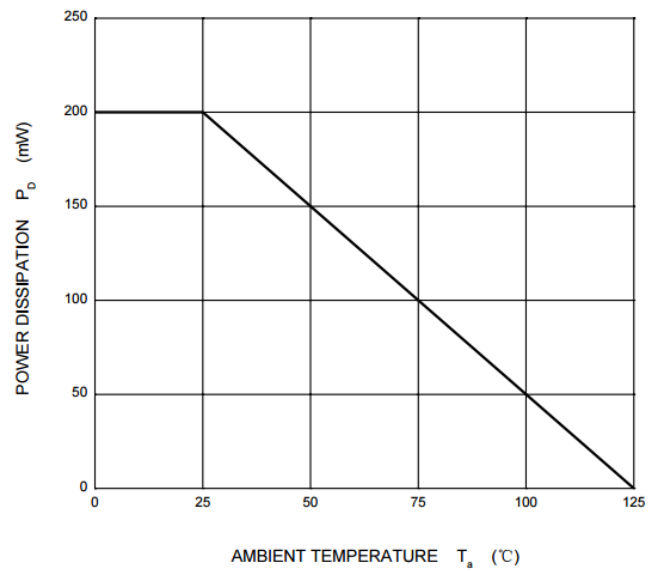
**Reverse Characteristics**

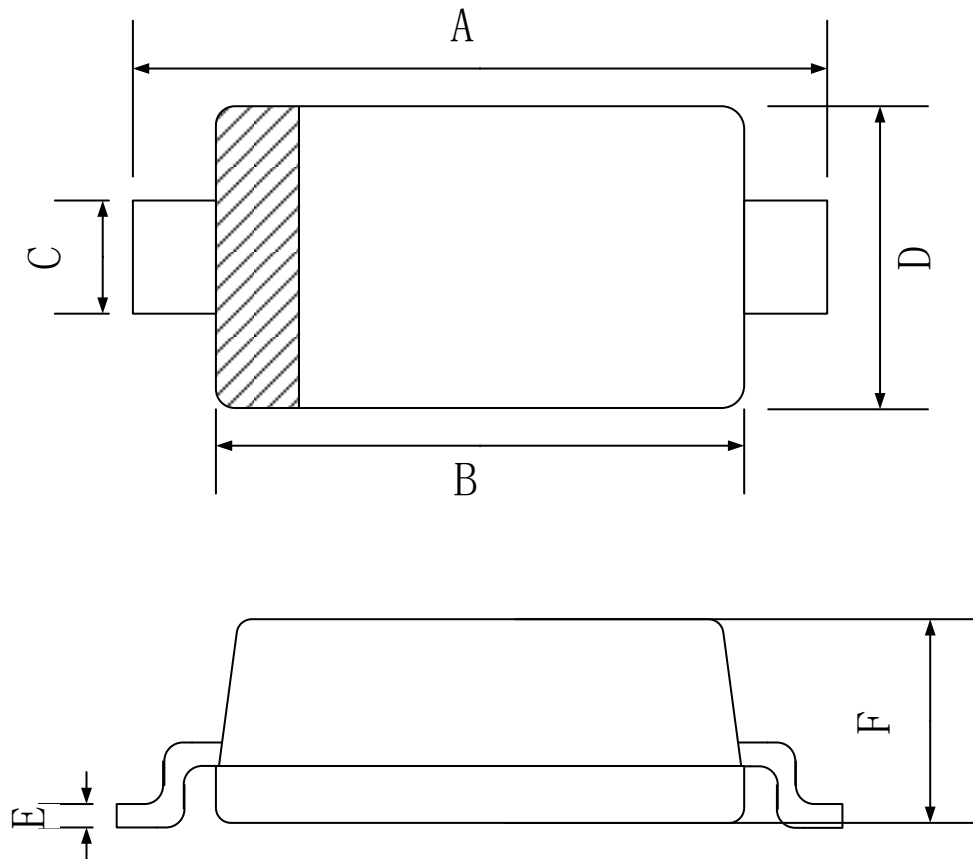


**Capacitance Characteristics**



**Power Derating Curve**



**SOD-323 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	2.30	2.50	2.70
B	1.60	1.70	1.90
C	0.25	0.325	0.40
D	1.15	1.25	1.35
E	0.089	0.095	0.101
F	0.80	0.90	1.00