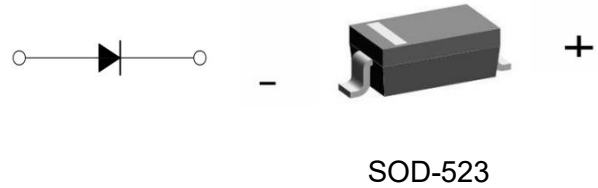


Schottky Barrier Diode

Parameter	Value	Unit
V_R	40	V
$I_{F(AV)}$	350	mA



Features

- Ultrafast Reverse Recovery Time
- Low Power Losses, High Efficiency
- Low Forward Voltage Drop
- High Surge Capability

Applications

- Low Voltage
- High-Frequency Inverters
- Free Wheeling
- Switching circuit

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

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current	$I_{F(AV)}$	350	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ Half-sine wave	I_{FSM}	2.0	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Typical thermal resistance	$R_{\theta JA}$	667	$^\circ\text{C}/\text{W}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40	-	-	V
Reverse current	I_R	$V_R=30\text{V}$	-	-	5	μA
		$V_R=20\text{V}$	-	-	2	
		$V_R=10\text{V}$	-	-	1	
Forward voltage	V_F	$I_F=1\text{mA}$	-	0.27	-	V
		$I_F=5\text{mA}$	-	0.32	-	
		$I_F=20\text{mA}$	-	-	0.37	
		$I_F=200\text{mA}$	-	-	0.6	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$	-	50	-	pF
Reverse recovery time	t_{rr}	$I_F=I_R=200\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$	-	10	-	ns

Typical Characteristics

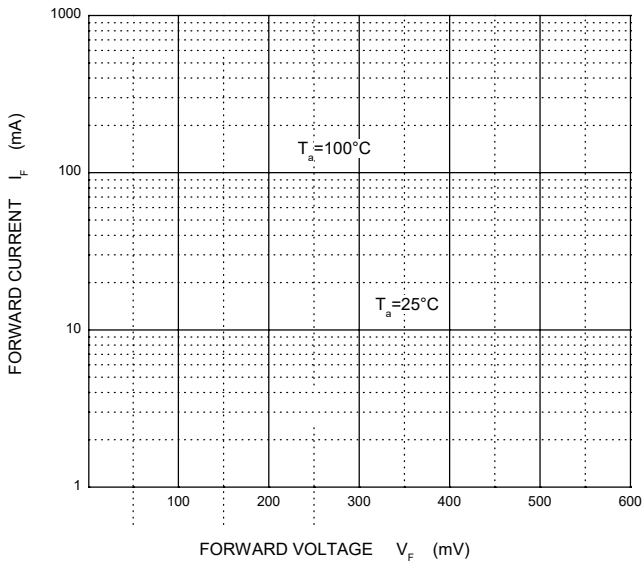


Fig.1 Typical Instantaneous Forward Characteristics

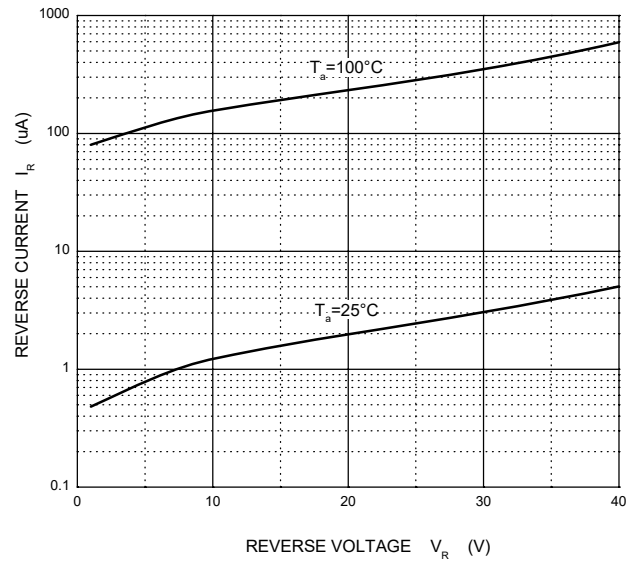


Fig.2 Typical Reverse Characteristics

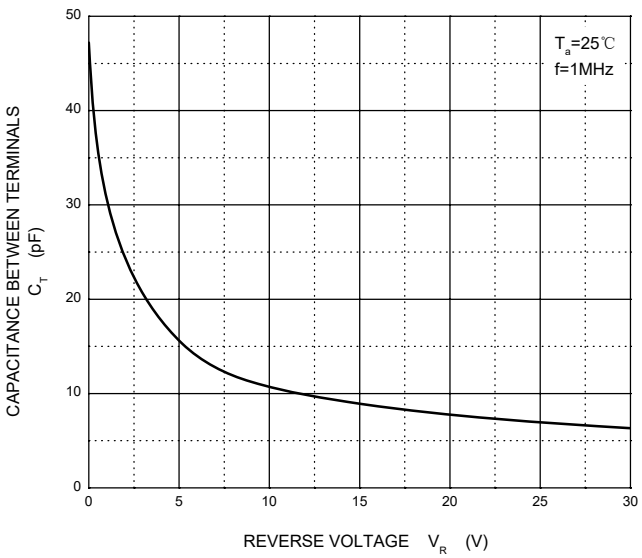


Fig.3 Typical Junction Capacitance

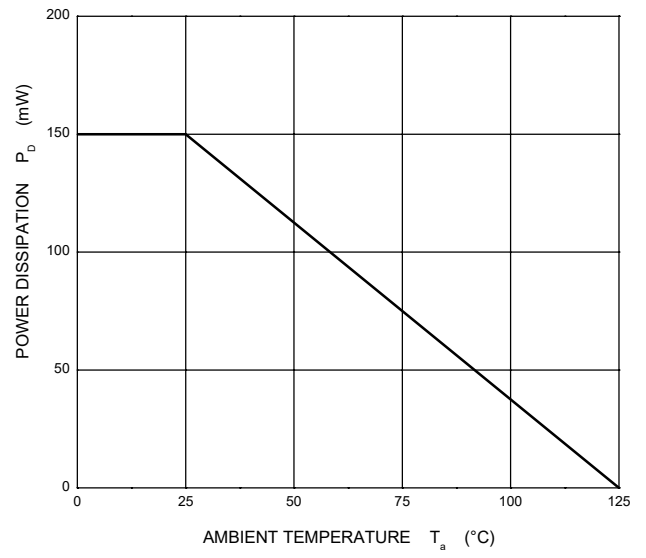


Fig.4 Power Derating Curve

Package Outlines (Units: mm)

	Symbol	Dimensions			
		Millimeters		Inches	
		Min	Max	Min	Max
	A	1.10	1.30	0.043	0.051
B	0.25	0.35	0.010	0.014	
C	1.50	1.70	0.059	0.067	
D	0.50	0.70	0.020	0.027	
E	0.70	0.90	0.027	0.035	
F	0.05	0.20	0.002	0.008	

Suggested Pad Layout

	Symbol	Dimensions			
		Millimeters		Inches	
		Min.	Max	Min.	Max
	X	0.55	0.65	0.022	0.026
Y	0.65	0.75	0.026	0.029	
Z	1.37	1.47	0.054	0.058	

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