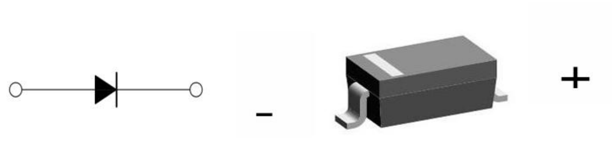
Schottky Barrier Diode

Parameter	Value	Unit
V_R	30	V
$I_{F(AV)}$	200	mA



SOD-523

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(Ta=25℃unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	21	V
Maximum DC blocking voltage	V_{DC}	30	V
Maximum average forward rectified current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	1.0	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	℃
Storage temperature range	T_{STG}	-55 ~+150	℃
Typical thermal resistance	$R_{\theta JA}$	667	℃ /W

Electrical Characteristics(Ta=25℃unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Type	Max	Unit
Maximum forward voltage	V_F	I_F=200mA	-	-	0.6	V
Maximum reverse current	I_R	V_R=10V	-	-	1.0	μA

Typical Characteristics

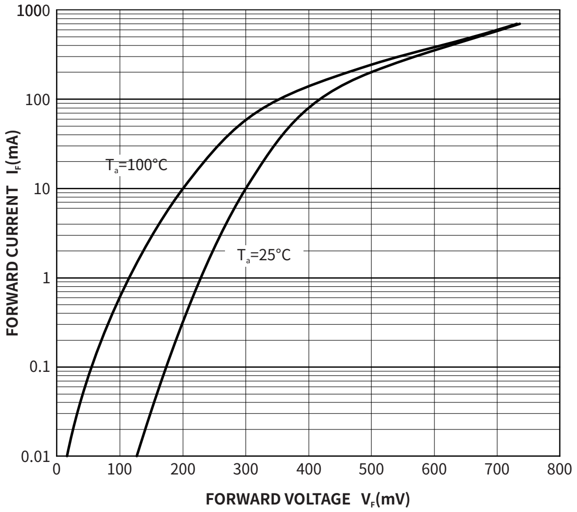


Fig.1 Typical Instantaneous Forward Characteristics

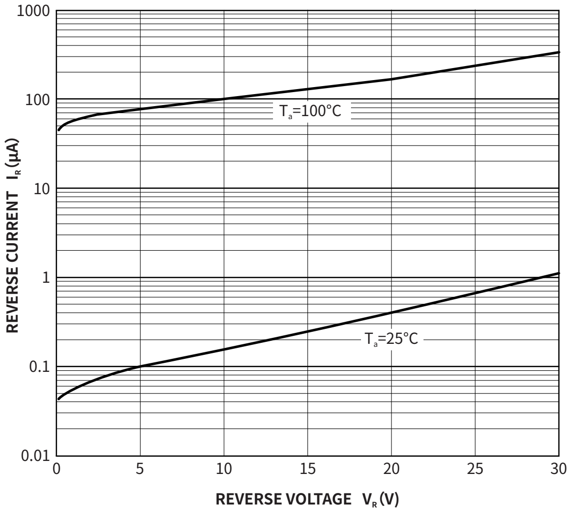


Fig.2 Typical Reverse Characteristics

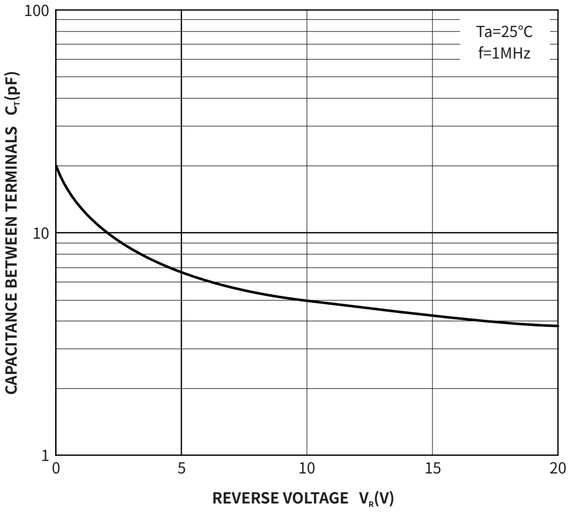


Fig.3 Typical Junction Capacitance

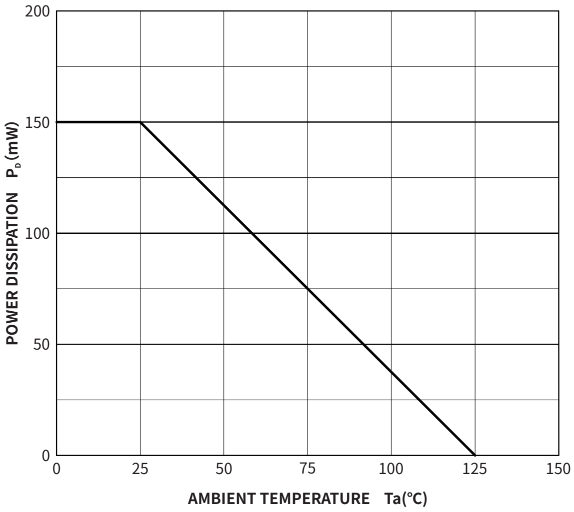
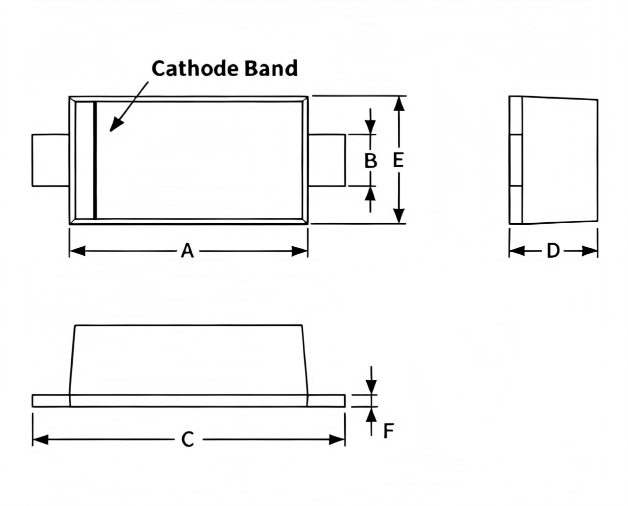


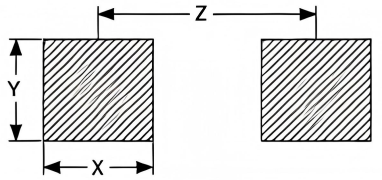
Fig.4 Power Derating Curve

Package Outlines (Units: mm)



Symbol	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Nax
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.	Nax
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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