Schottky Barrier Diode

Parameter	Value	Unit
V_R	30	V
$I_{F(AV)}$	500	mA

SOD-323

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}	20	V
Maximum DC blocking voltage	V_{DC}	20	V
Maximum average forward rectified current	$I_{F(AV)}$	500	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	2.0	A
Power Dissipation	P_D	250	mW
Junction Temperature	T_J	125	℃
Storage temperature range	T_{STG}	-65 ~+150	℃
Typical thermal resistance	$R_{\theta JA}$	400	℃ /W

Electrical Characteristics(Ta=25℃unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Type	Max	Unit
Maximum forward voltage	V_F	I_F=0.1A	-	-	0.36	V
		I_F=0.5A	-	-	0.47	
Maximum reverse current	I_R	V_R=20V	-	-	100	μA

Typical Characteristics

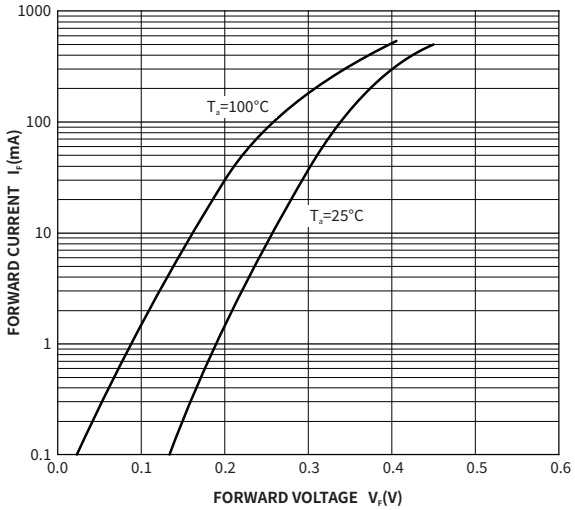


Fig.1 Typical Instantaneous Forward Characteristics

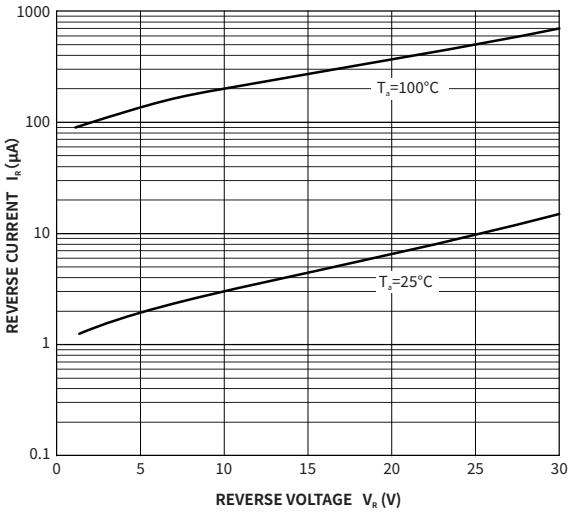


Fig.2 Typical Reverse Characteristics

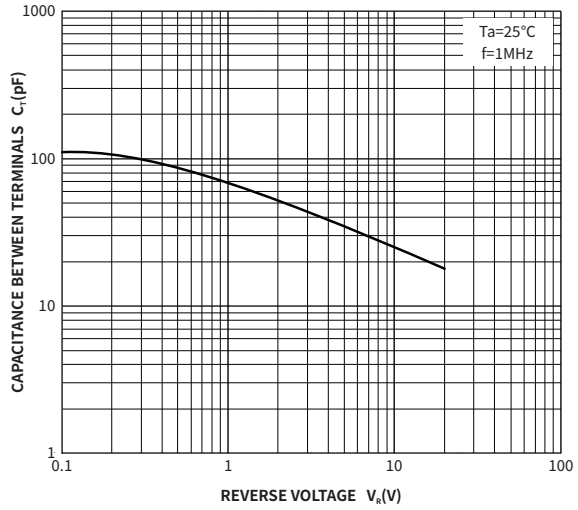


Fig.3 Typical Junction Capacitance

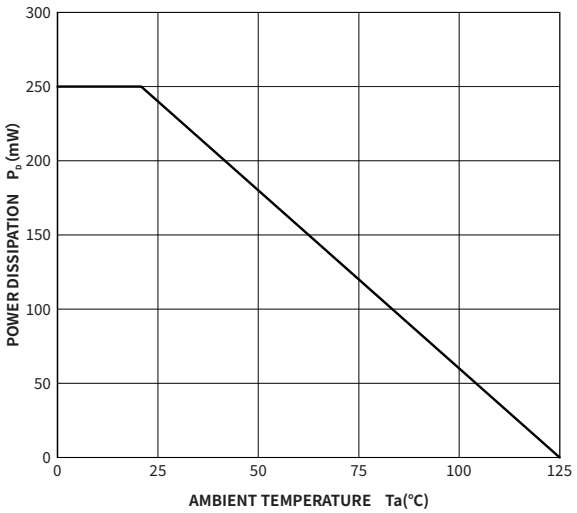
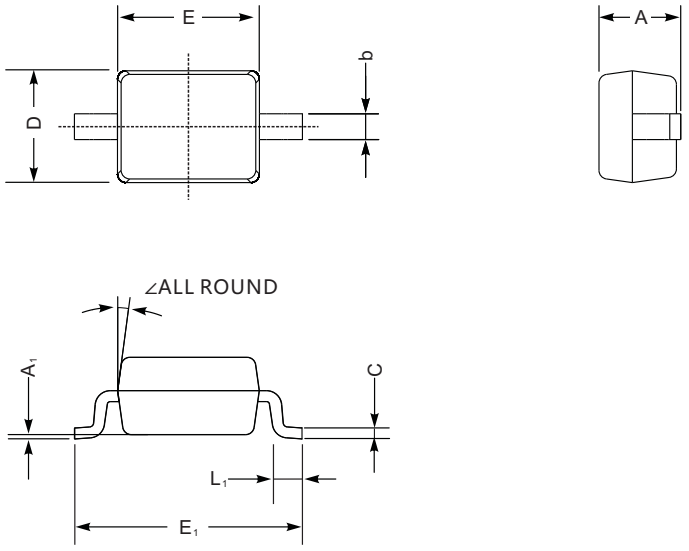


Fig.4 Power Derating Curve

Package Outlines (Units: mm)

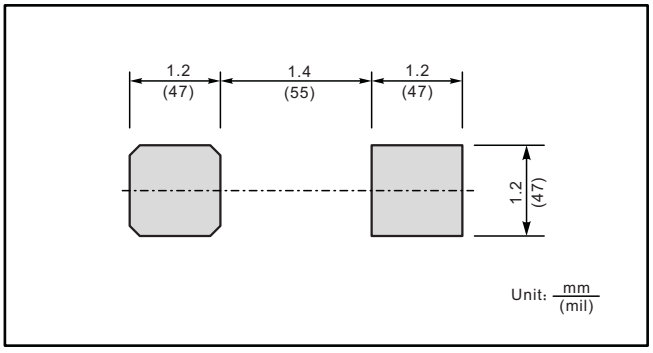
Plastic surface mounted package; 2 leads



SOD-323 mechanical data

UNIT		A	C	D	E	E_1	b	L_1	A_1	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



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