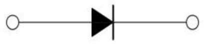
Schottky Barrier Diode

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



SOD-123

Features

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package

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
Repetitive peak forward current	I_{FRM}	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	600	mA
Power Dissipation	P_D	500	mW
Junction temperature	T_J	-55-+150	℃
Storage temperature range	T_{STG}	-55-+150	℃
Typical thermal resistance	$R_{\theta J\text{-}A}$	250	℃ /W

Electrical Characteristics(Ta=25℃unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Type	Max	Unit
Maximum forward voltage	V_F	I_F=0.1mA	-	-	240	mV
		I_F=1.0mA	-	-	320	
		I_F=10mA			400	
		I_F=30mA			500	
		I_F=100mA	-	-	800	
Maximum reverse current	I_R	V_R=25V	-	-	2.0	uA
Capacitance between terminals	C_T	V_R=1.0V, f=1MHz	-	10	-	pF

Typical Characteristics

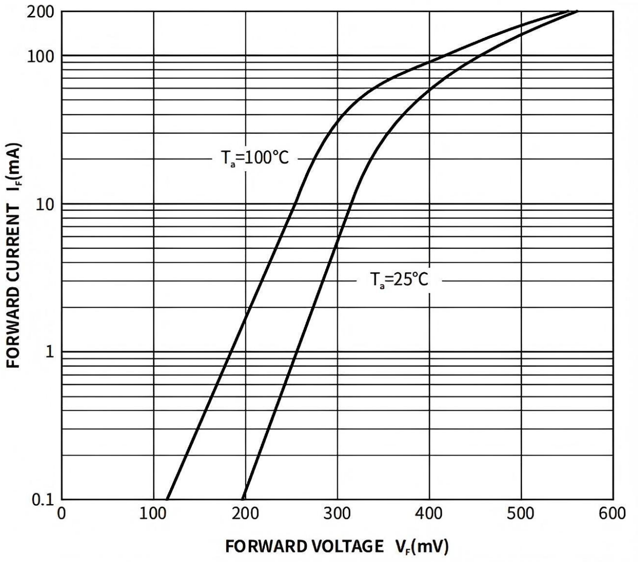


Fig.1 Typical Instantaneous Forward Characteristics

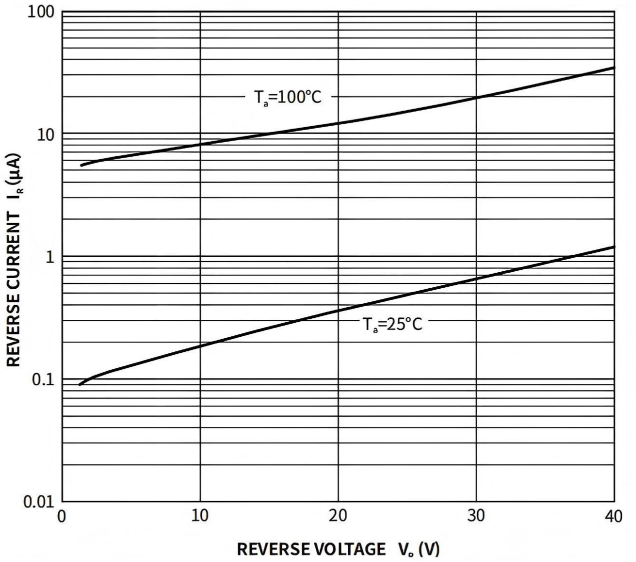


Fig.2 Typical Reverse Characteristics

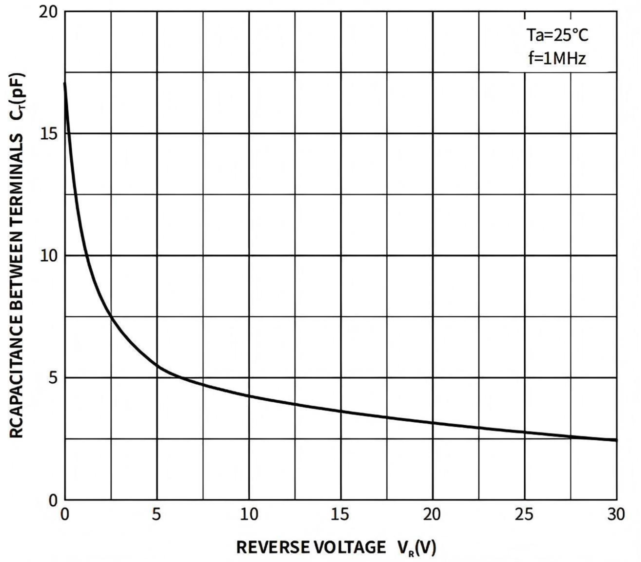


Fig.3 Typical Junction Capacitance

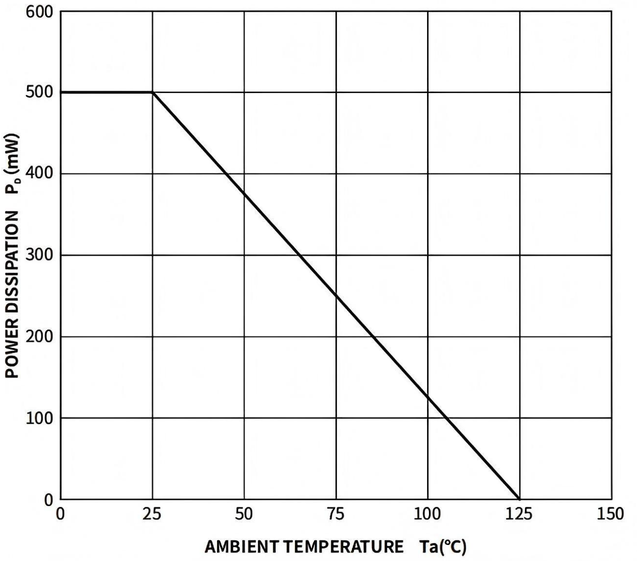
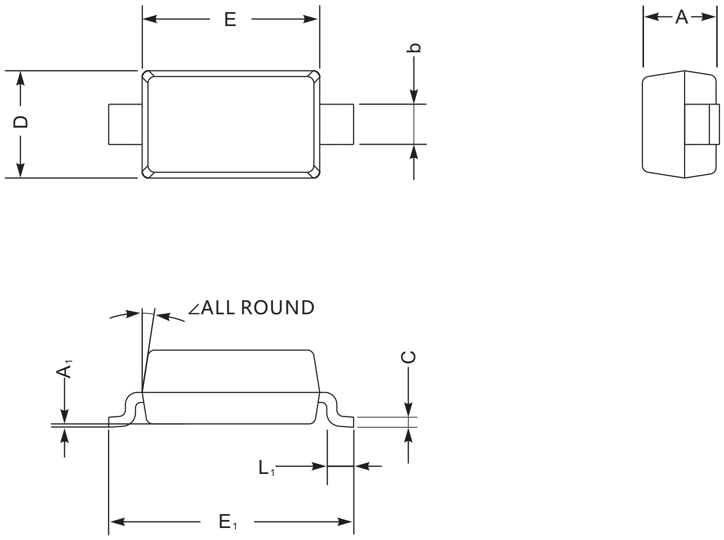


Fig.4 Power Derating Curve

Package Outlines (Units: mm)

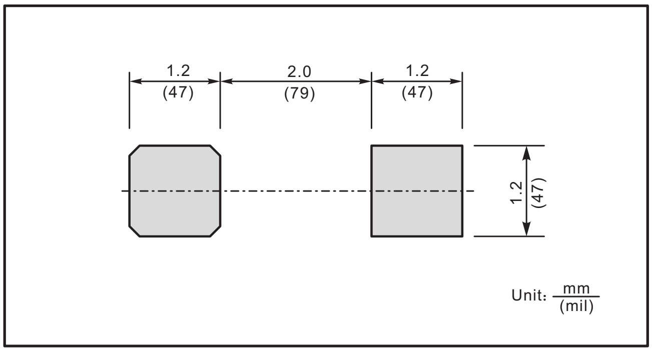
Plastic surface mounted package; 2 leads



SOD-123 mechanical data

UNIT		A	C	D	E	E_1	L_1	b	A_1	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



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