

1SS357

Schottky Barrier Rectifiers

■ Features

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally
Suited for Automated Insertion
- Lead, Halogen and Antimony Free,
RoHS Compliant "Green" Device

■ Marking

Type number	Marking code
1SS357	S31

■ Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	1SS357	Units
Peak reverse Voltage	V_{RM}	45	V
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	100	mA
Non-Repetitive Peak Forward Surge Current @t = 8.3ms	I_{FSM}	1	A
Power dissipation	P_D	200	mW
Forward Voltage $I_F=1mA$ $I_F=10mA$ $I_F=100mA$	V_F	0.35(Max) 0.45(Max) 0.60(Max)	V
Peak Reverse Current $V_R=40V, T_j=25^{\circ}C$	I_R	5(Max)	uA
Typical Junction Capacitance $V_R=0V, f=1MHz$	C_T	25(Max)	pF
Thermal Resistance, Junction to Ambient Air (NOTE 1)	$R_{\theta JA}$	500	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Notes: 1. Part mounted on FR-4 board with recommended pad layout.

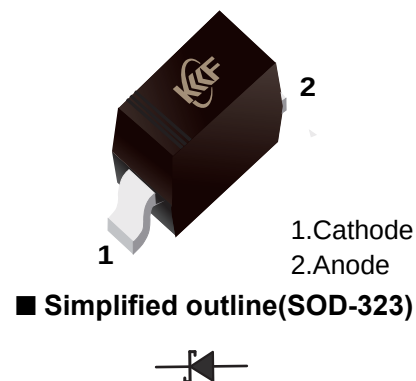


Fig.1 Power Derating Curve

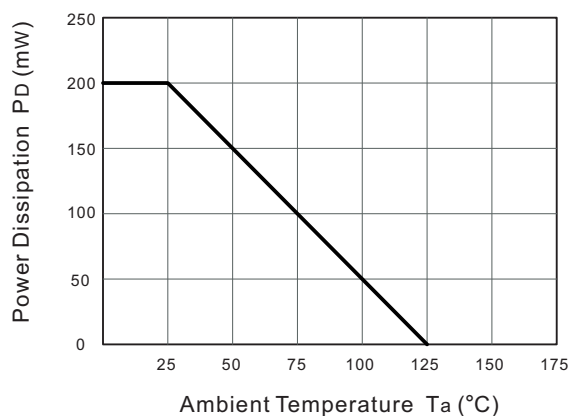


Fig.2 Typical Instantaneous Reverse Characteristics

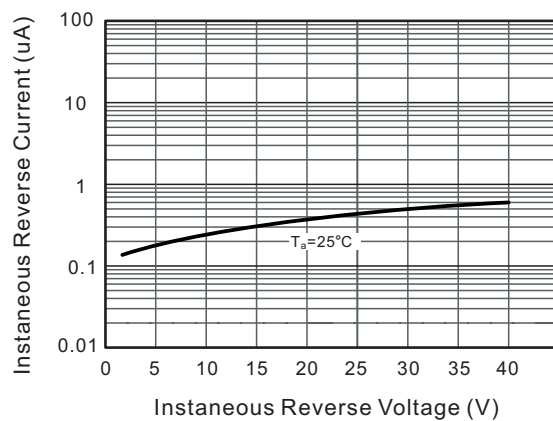


Fig.3 Typical Forward Characteristic

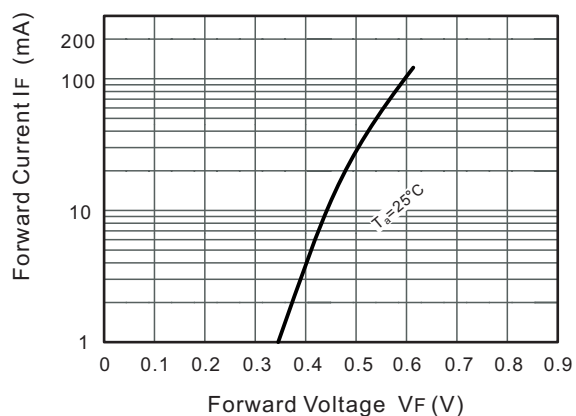
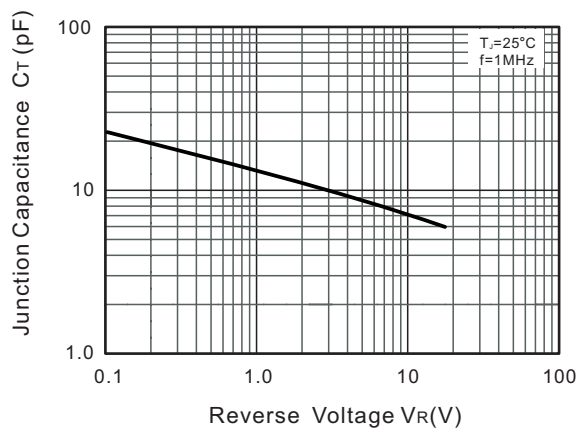
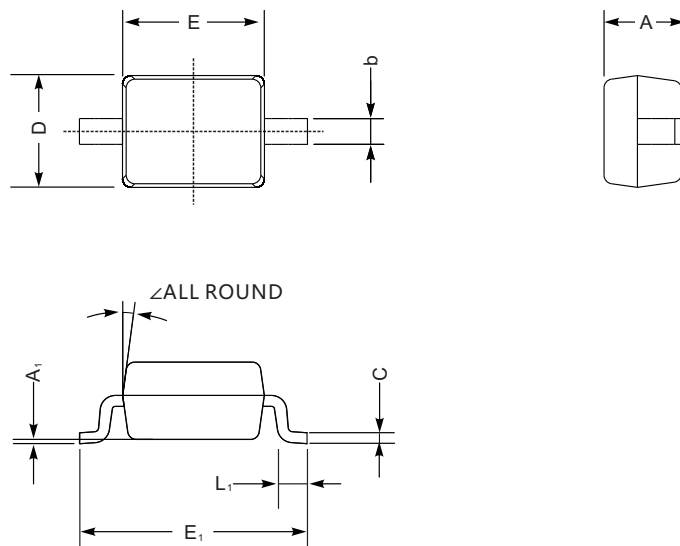


Fig.4 Typical Junction Capacitance



■ SOD-323



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

