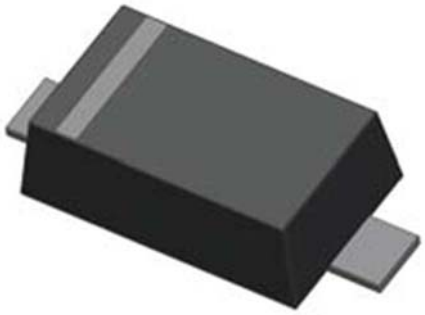
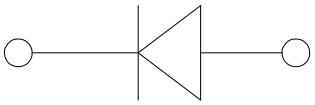
Small-Signal Fast Switching Diodes





Features

- Moisture sensitivity level 1
- Reverse voltage: 80V
- Average forward current : 100mA

Application

- High frequency rectifier
- Signal switching

Mechanical data

- **Package**: SOD-523
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ **Maximum Ratings** (T_a=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			A
Repetitive peak reverse voltage	V_{RRM}	V	90
Forward current	I_{FM}	mA	225
Average rectified output current	I_O	mA	100
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	2
Non-repetitive surge peak forward current @ t=1ms square wave			1.5
Power dissipation	P_D	mW	150
Junction temperature	T_J	℃	-55 to +150
Storage temperature	T_{STG}	℃	-55 to +150

■ Electrical Characteristics (Ta=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	I_R=100uA	80		
Forward voltage	V_F	V	I_F=100mA			1.2
Reverse leakage current	I_R	uA	V_R=80V			0.1
Junction capacitance	Cj	pF	V_R= 0.5V, f =1MHZ			3
Reverse recovery time	Trr	ns	V_R=6V, I_F=10mA, R_L=100 Ω			4

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	833
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	667

Note:

（1）Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 8mm*9mm copper pad areas

■Characteristics

Fig 1：P_D-Ta Curve

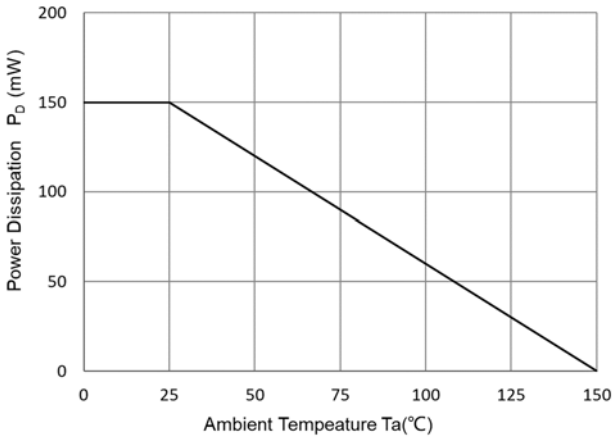


Fig 2：Capacitance Capability

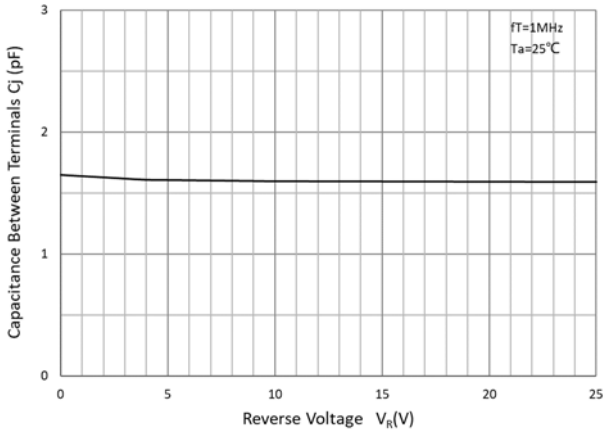


Fig 3：Typical Forward Characteristics

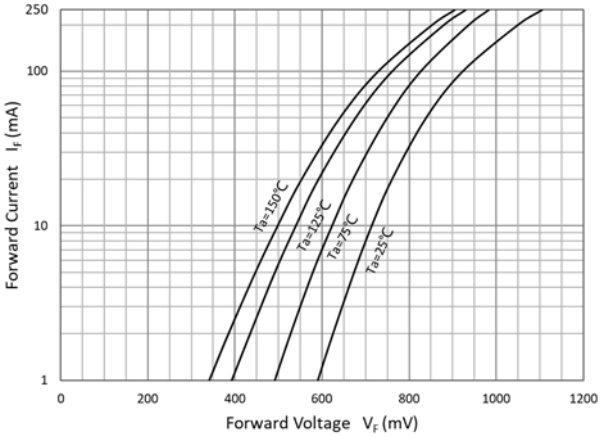
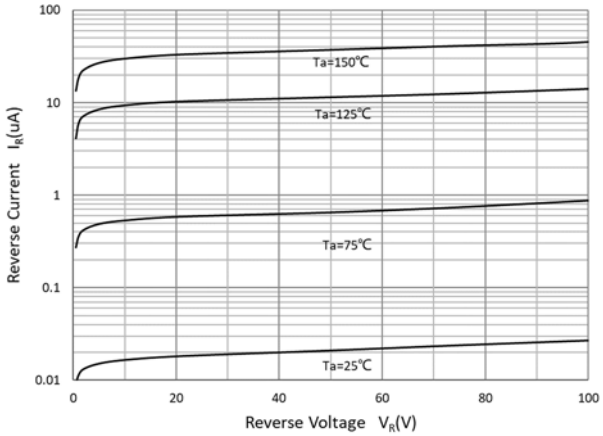


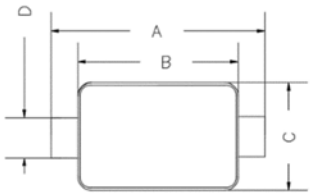
Fig 4：Typical Reverse Characteristics



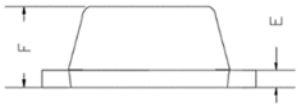
■Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
1SS400	F2	Approximate 0.002	8000	80000	320000	7” reel
1SS400	F3	Approximate 0.002	3000	30000	120000	7” reel

■ Outline Dimensions



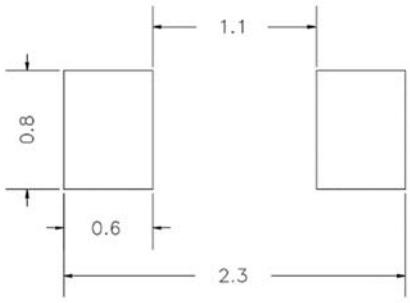
TOP VIEW



SIDE VIEW

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

■ Suggested Pad Layout



UNIT: mm

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