

SOD-523 Plastic-Encapsulate Diodes

Small Signal Fast Switching Diodes

Features

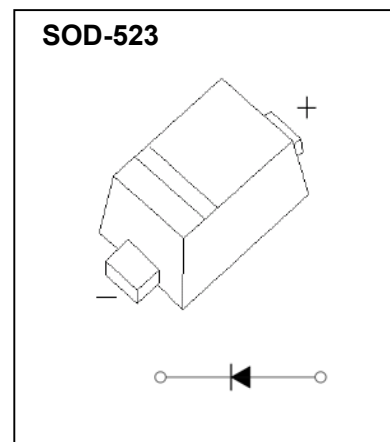
- V_R 250V
- I_{FAV} 200mA

Typical Applications

- Extreme fast switches

Mechanical Data

- **Package:** SOD-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** JS



■ Maximum Ratings (Ta=25°C Unless otherwise specified)

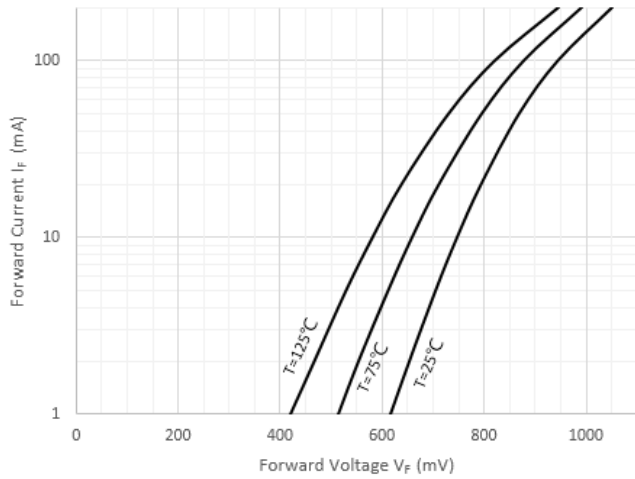
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		250
Reverse Voltage	V_R	V		250
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	$t=8.3ms$, Half sine-wave	2
Average forward current	I_{FAV}	mA		200
Power dissipation	P_D	mW		150
Junction temperature	T_j	°C		150
Storage temperature range	T_{stg}	°C		-55 to +150

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

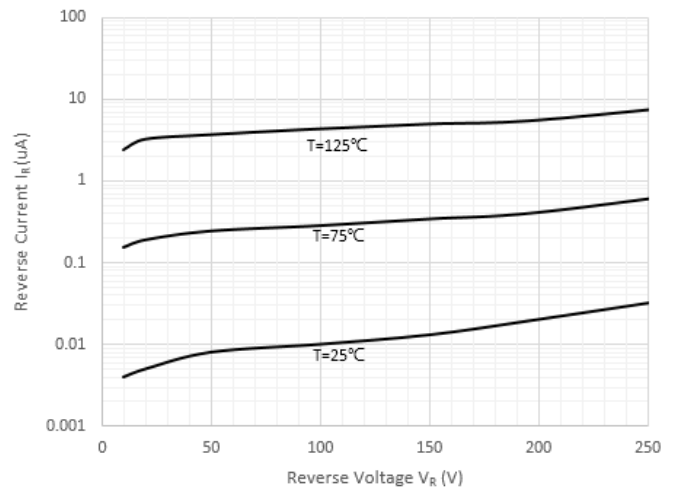
PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Maximum Forward voltage	V_F	V	$I_F=100mA$		1.1
Maximum Reverse current	I_R	nA	$V_R=250V$		150
Minimum Breakdown voltage	V_R	V	$I_R=100\mu A$	250	
Maximum Diode capacitance	C_D	pF	$V_R=0V$, $f=1MHz$		5
Maximum Reverse recovery time	t_{rr}	ns	$I_F=I_R=30mA$, $R_L=100\Omega$, $I_{RR}=3mA$		50

Typical Characteristics

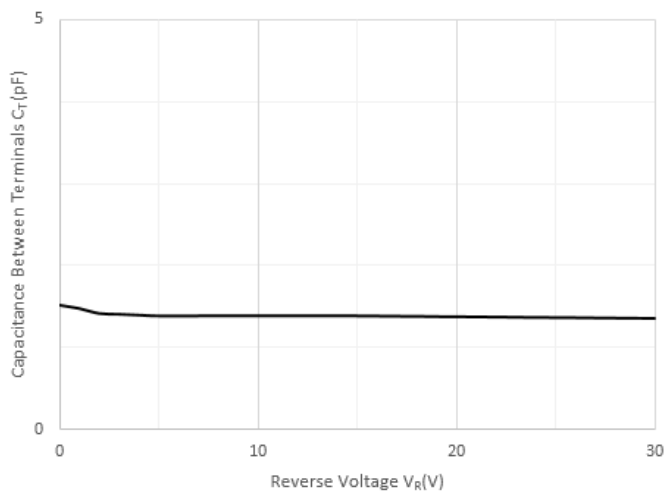
Forward Characteristics



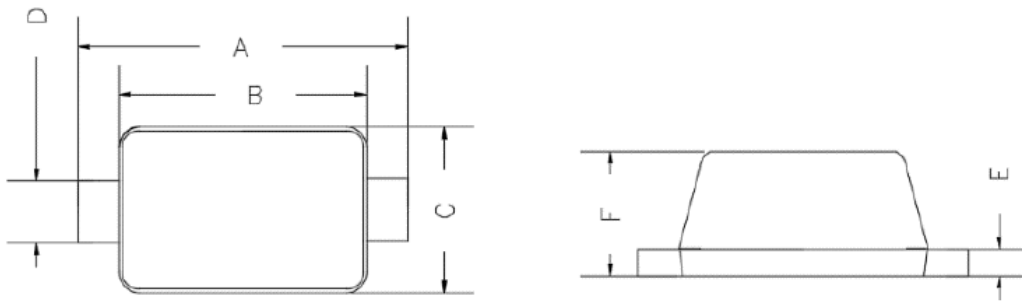
Reverse Characteristics



Capacitance Characteristics

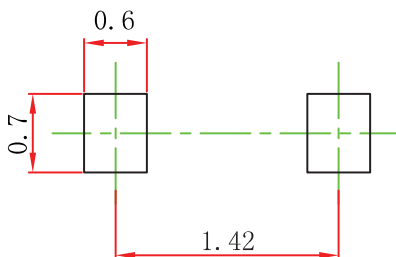


SOD-523 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	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

SOD-523 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

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