

► Features

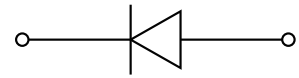
- V_R 100V
- $I_{F(AV)}$ 150mA
- For use in low voltage, high frequency inverters
- Free wheeling, and polanty protection applications

► Applications

For use in low voltage high frequency circuit signals.

► Mechanical Data

- Case: SOD-323
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

SOD-323


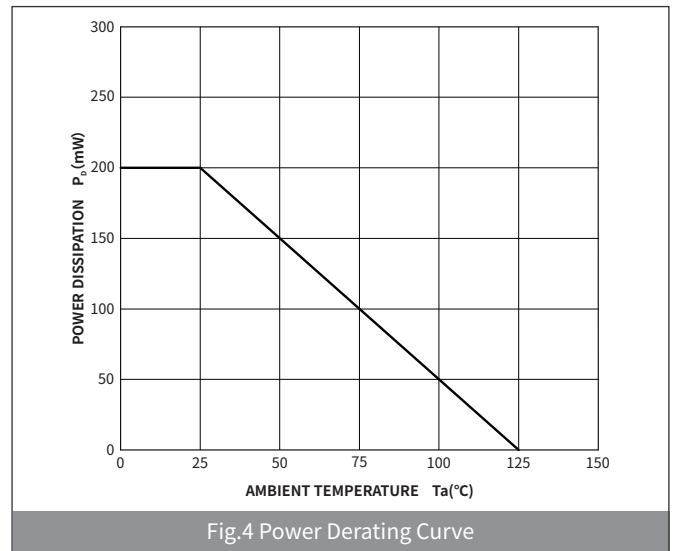
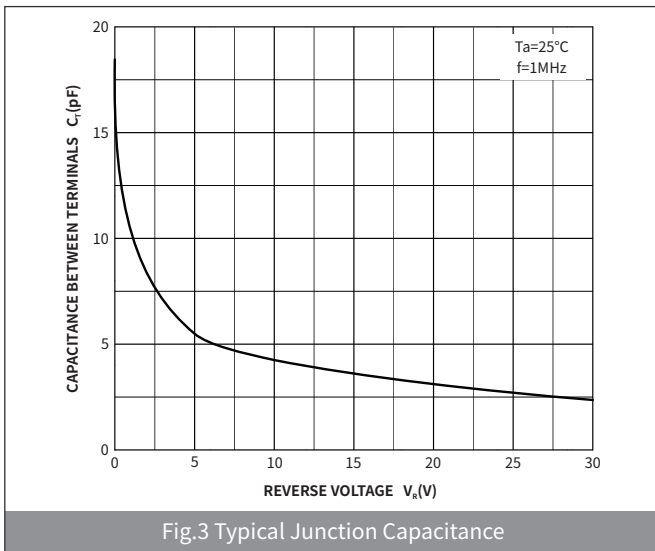
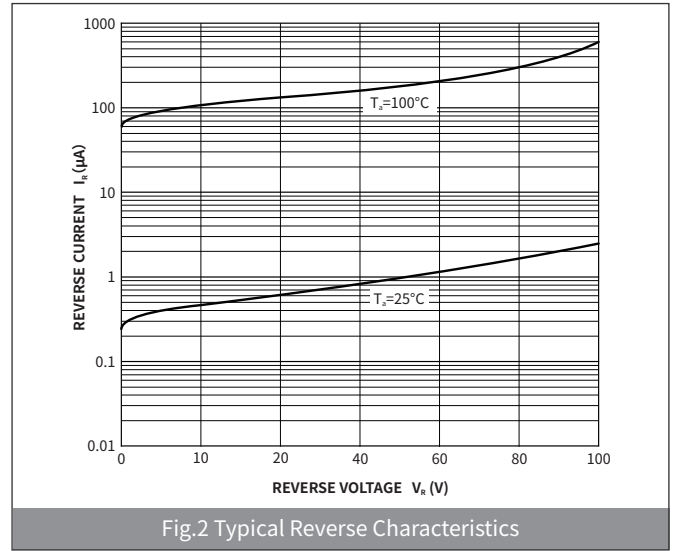
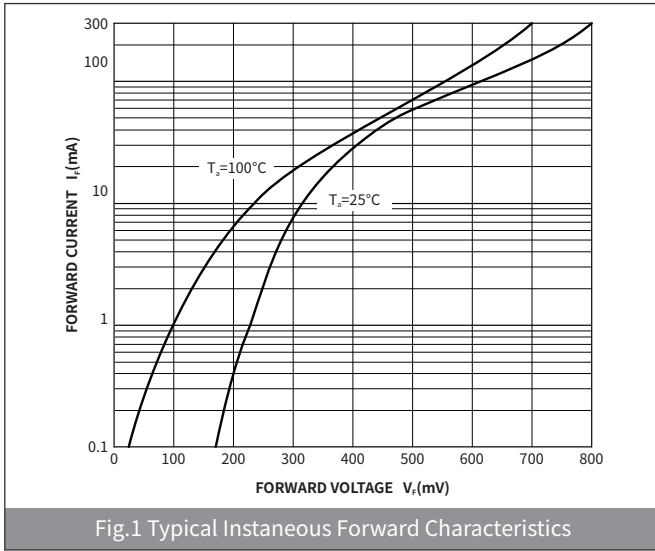
► Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	100
Maximum RMS Voltage	V_{RMS}	V	100
Maximum DC blocking Voltage	V_{DC}	V	100
Maximum Average Forward Rectified Current	$I_{F(AV)}$	mA	150
Repetitive peak forward current	I_{FRM}	mA	350
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	mA	750
Power Dissipation	P_D	mW	200
Storage temperature	T_{stg}	°C	-65 ~ +150
Junction temperature	T_j	°C	-55 ~ +125
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	500

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	Min	Typ	Max
Maximum forward voltage	$I_F=0.1mA$	V_F	V	—	—	0.25
	$I_F=10mA$			—	—	0.45
	$I_F=250mA$			—	—	1.0
Maximum Reverse current	$V_R=1.5V$	I_R	μA	—	—	0.3
	$V_R=10V$			—	—	0.5
	$V_R=50V$			—	—	1.0
	$V_R=75V$			—	—	2.0
Capacitance between terminals	$V_R=0V, f=1MHz$	C_T	pF	—	20	—

► **Ratings And Characteristics Curves** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323	R1	0.0048	3000	30000	120000	7"

Package Outline Dimensions (SOD-323)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.40	0.010	0.016
C	2.30	2.80	0.091	0.110
D	0.80	1.10	0.031	0.043
D ₁	0.80	0.90	0.031	0.035
E	1.20	1.40	0.047	0.055
F	0.08	0.18	0.003	0.007
L	0.475REF		0.019REF	
L ₁	0.25	0.40	0.010	0.016
H	-	0.14	-	0.006

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	0.80	-	0.031	-
K	-	1.40	-	0.055
M	0.80	-	0.031	-