

► Features

- High Current Capability
- Low Forward Voltage Drop
- Low IR
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

► Applications

The device is a single rectifier offering low VF and excellent high temperature stability.

► Mechanical Data

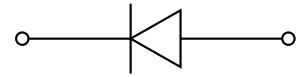
- Case: SOD-323
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

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

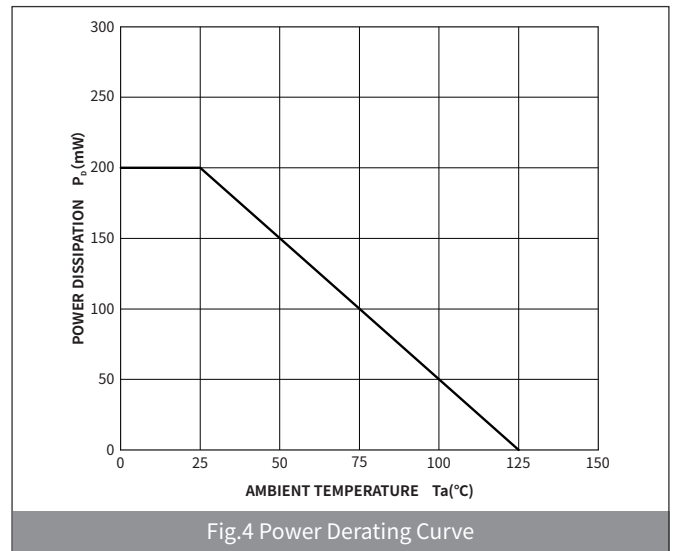
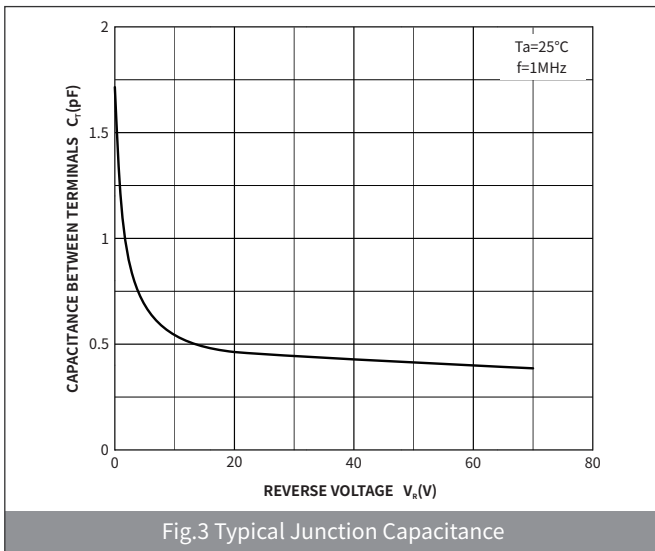
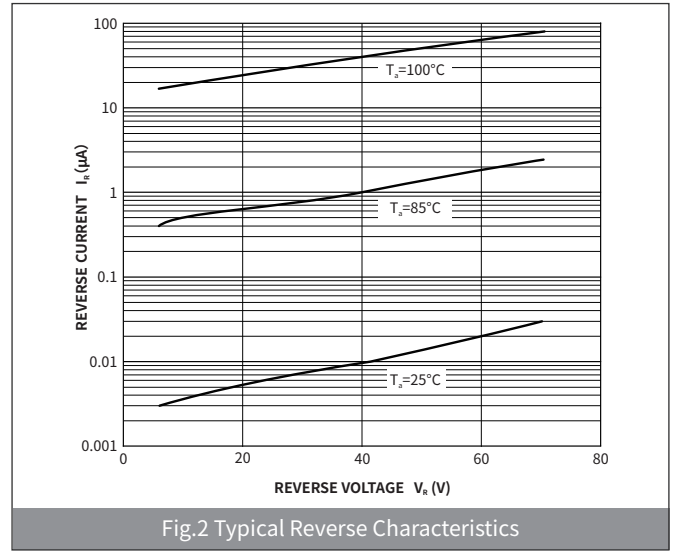
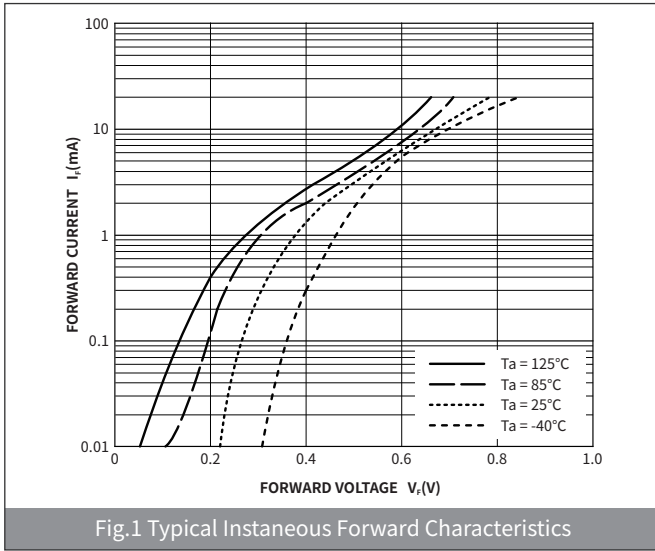
PARAMETER	SYMBOL	UNIT	VALUE
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	70
Working peak reverse voltage	V_{RWM}	V	70
Reverse Breakdown voltage @ $I_R=10\mu A$	$V_{(BR)R}$	V	70
Maximum average forward rectified current	$I_{F(AV)}$	mA	70
Non-repetitive Peak Forward Surge Current @ $t=8.3ms$ Half-sine wave	I_{FSM}	mA	100
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	625

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	Min	Typ	Max
Maximum forward voltage	$I_F=1mA$	V_F	V	—	—	0.41
	$I_F=15mA$			—	—	1.0
Maximum reverse current	$V_R=50V$	I_R	nA	—	—	100
Capacitance between terminals	$V_R = 0V, f = 1MHz$	C_T	pF	—	—	2.0
Maximum reverse recovery time	$I_F=I_R=10mA$ $I_R=10mA, R_L=100\Omega$	t_{rr}	ns	—	—	5.0

SOD-323


► **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	-