

### Plastic-Encapsulate Diodes

Schottky Barrier Diode

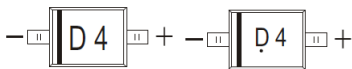
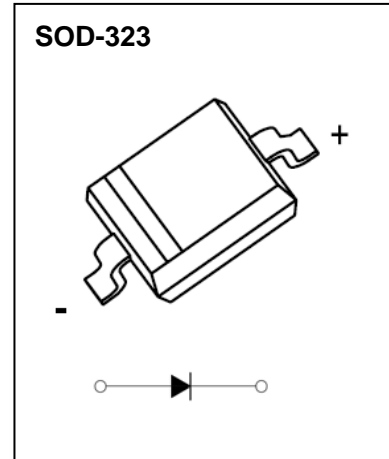
**FEATURES**

- Small Surface Mounting Type
- Low  $V_F$
- High Reliability

**APPLICATIONS**

- High-Frequency Rectification Switching Regulators

**MARKING: D4**



The marking bar indicates the cathode  
Solid dot = Green molding compound device,if none,  
the normal device.

**MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$  unless otherwise noted )**

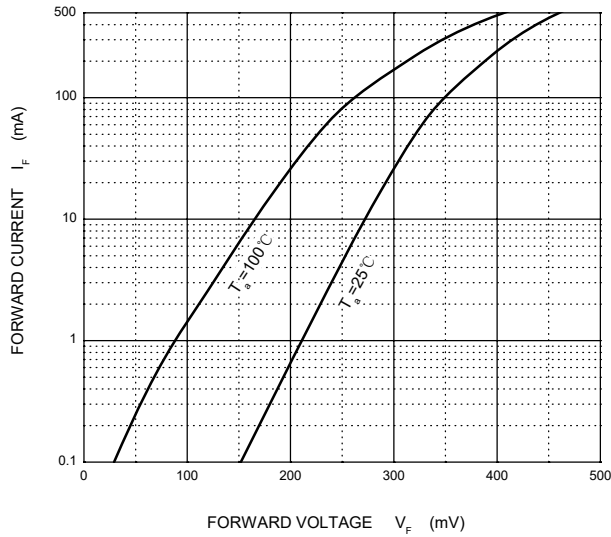
Symbol	Parameter	Value	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	40	V
$I_o$	Continuous Forward Current	500	mA
$I_{FSM}$	Non-repetitive Forward Peak Surge Current @ $t=8.3\text{ms}$	2	A
$P_D$	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	500	$^\circ\text{C}/\text{W}$
$T_j$	Operating Junction Temperature Range	-40 ~ +125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55 ~ +150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$  unless otherwise specified)**

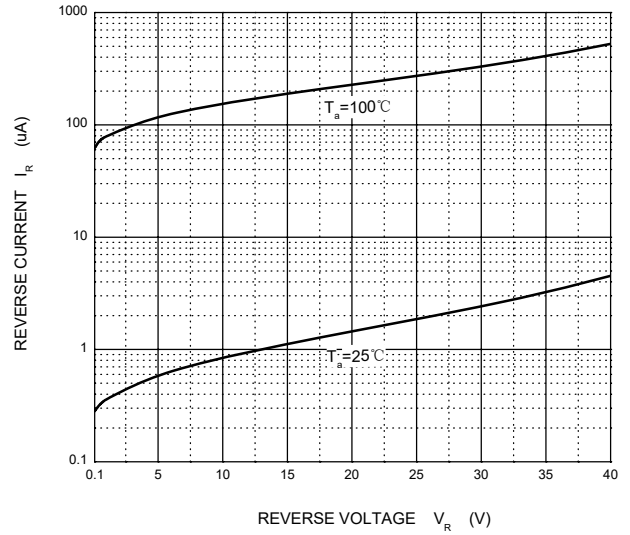
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1\text{mA}$	40			V
Reverse current	$I_R$	$V_R=40\text{V}$			0.1	mA
Forward voltage	$V_F$	$I_F=500\text{mA}$			0.47	V

## Typical Characteristics

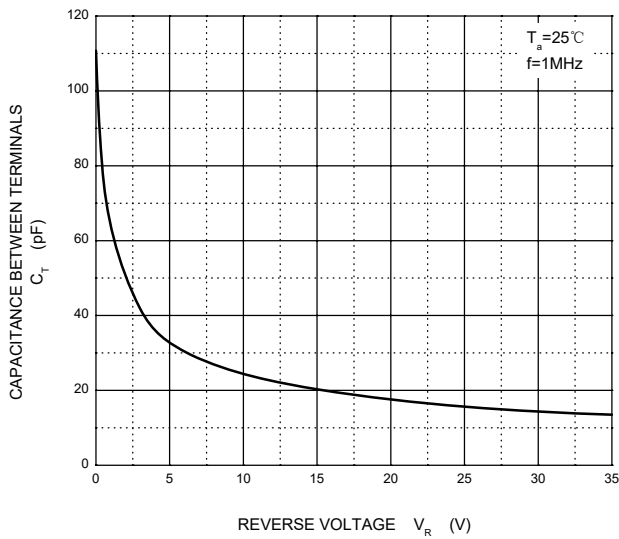
Forward Characteristics



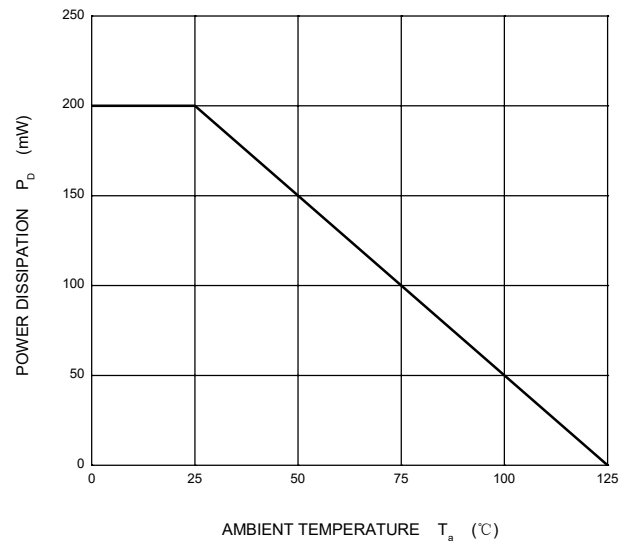
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

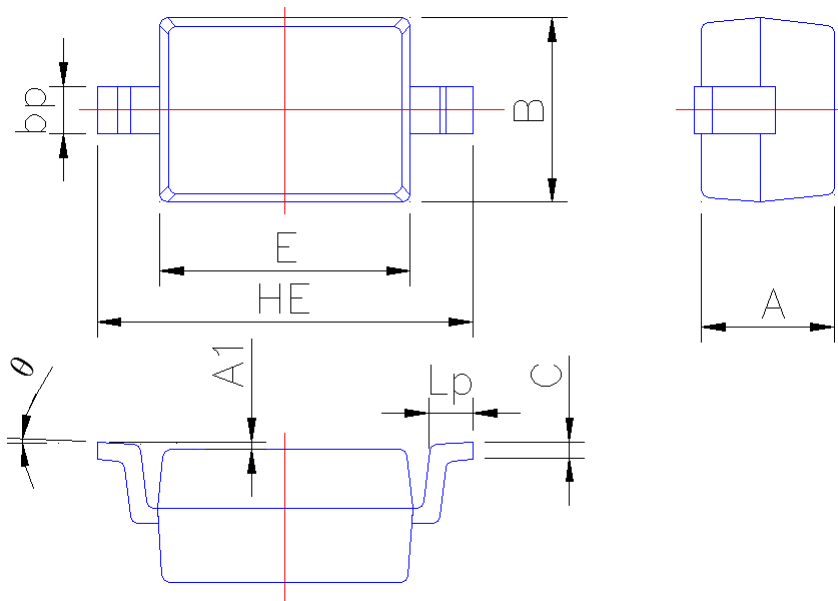




## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.40
C	0.09	0.150
E	1.60	1.80
HE	2.30	2.70
Lp	0.20	0.40
$\theta$	0°	5°